

# MOTOR AGE

Vol. V No. 21

MAY 26, 1904

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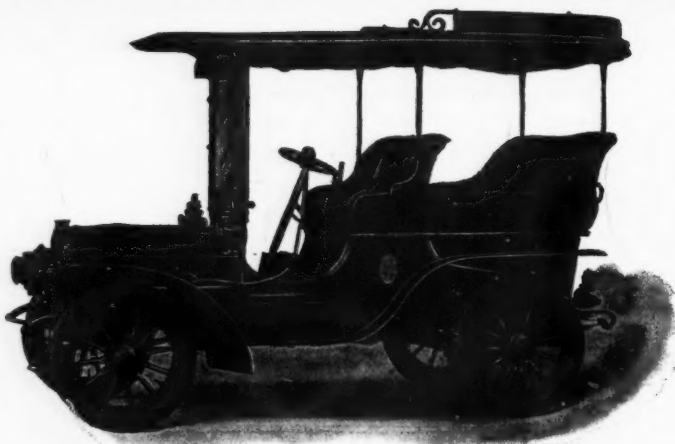
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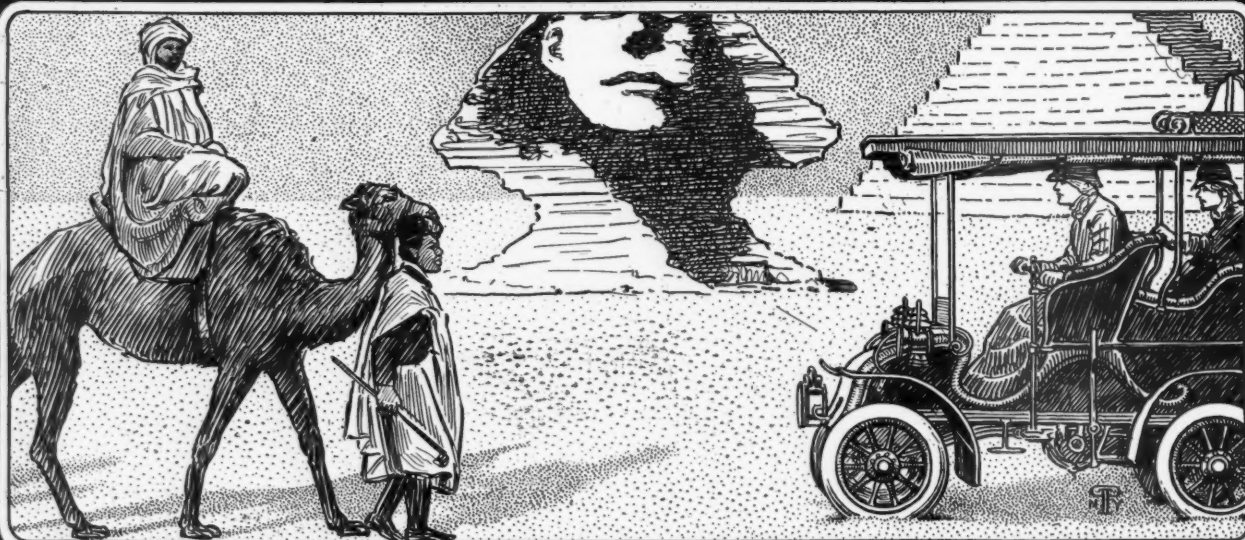
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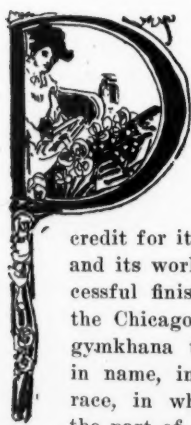
MAY 26, 1904

\$2.00 Per Year

## CHICAGO'S SCRAMBLING PARADE



THE CLUB HOUSE VERANDA AND A GROUP OF MEMBERS AND GUESTS



PARADING in automobiles is not an exact science, if the parade of last Saturday in Chicago may be taken as an average performance. It was a good parade and the Chicago Automobile Club deserves

credit for its enterprise in promoting it, and its work in conducting it to a successful finish. But as a spectacle for the Chicago public it became rather a gymnkhana than a procession. Parade in name, in effect it was an obstacle race, in which Chicago traffic played the part of the obstacle. There was no prize for covering the course, but many of the contestants were simon pure amateurs and were willing to take a chance for the sake of mere glory. It was rumored that Chief of Police O'Neill, who accompanied President Farson, was much disappointed because he was forced to finish in the "tourist" brigade.

The story of the parade is easily told: A fine day; boulevards lined with good natured onlookers; 228 automobiles; a band; human nature, and a scramble. It brought to memory old bicycling days when a bicycle parade developed into a jockeying contest, in which the participants all seemed anxious to be near the fellows who were most likely to "start something."

In some of the daily papers the parade duti-

fully wended its way at the genteel pace of 8 miles an hour; but in Michigan avenue it was different, and the electric trucks which brought up the rear had to cut the course a little bit

to get back to the judges' stand before the crowd left.

The parade was an excellent demonstration of the fact that an electric freight truck full of music is not swift enough to lead an automobile parade. A James Gordon Bennett international cup race team would be more fitting, with Messrs. Rigolly, Jenatzy, Edge, Farman and Oldfield as chief marshalls.

The parade had been under preparation for some time and the club had invited all automobilists to participate in it, the object being to demonstrate the prominent, peaceful part automobiles play in the affairs of Chicago, rather than to simply boost the club in the community's estimation. It was to be a gala day and the mayor and other well known citizens had been asked to join in the festivities.

The club did its part well, the weather man furnished a bright, cheerful spring day, and the automobilists gathered on time, so that the parade was actually started on or close to the scheduled hour. It was a prepossessing array of well behaved automobilists and as the cavalcade wound westward toward the first objective point it was about as orderly a string of motorists as would be possible to get together.



THE PARADE ON JACKSON BOULEVARD, NEARING STATE STREET, ON RETURN TRIP



DR. GREENE ENJOYS THE PARADE



CADILLACS WERE PLENTIFUL

At the beginning of the second lap, however, some of the middle bunch stole by the leaders and set a hot pace for the grand stand. The parade loosened up and was soon spread all around the track. When the bell rang for the commencement of the last lap, the participants were so strung out over the course that the scorers lost track of the laps and were unable to furnish an accurate table of the order of the finish. In fact, after first honors had been nominally awarded, a "knocker" came in with a yarn about the hero having cut the course, and so about the only decision that the judges could make was that the band wagon had been lapped twice.

Despite the breaking-up of the procession, however; despite the persistent breaking of the speed limit of the city of Chicago, and despite the inconsiderate "shaking" of the band wagon and the commercial vehicle section, the parade accomplished one thing that had never been accomplished before by a Chicago parade. It covered the schedule course without causing the onlookers to lose two meals waiting for it to go by.

In doing this, it incidentally taught Chicago a more important lesson than would have been taught had it made its way with military precision. It showed Chicagoans that over 200 automobiles could run through the most crowded thoroughfares in the world at from

15 to 20 miles an hour without damaging anybody or anything.

It is probable that the way the vehicles went helter-skelter through the city without danger of accident of any kind did more to impress the city officials who were on the run with the great convenience and safety of the automobile as a city conveyance than a mere lock step in which restraint rather than skill, intelligence and adaptability to conditions, preserved the peace of the community, would have done.

Automobiling had shown itself to be entirely in sympathy with the conditions of congested traffic, even when carried on at a speed greater than that prescribed by the municipal regulations.

At one time there were 200 automobiles going both north and south on Michigan avenue within an area of six blocks, and travelling at speeds varying from 10 to 25 miles an hour. In addition to these cars were hundreds of horse-drawn vehicles, and thousands of pedestrians.

It was ordinary automobiling, with the number of cars on the same street at one time greatly increased. It was the same kind of automobiling that has been called dangerous and worse names by daily papers and motor-phobes in general. It was the same kind of automobiling that municipal governments seek

to "regulate" with licensing, numbering and speed limiting. It was the automobiling of Chicago, centralized for a brief spell.

If Chicago's automobiling scattered over the city is a dangerous factor in the use of the streets, surely this collective automobiling should have been much more dangerous. Yet there was no accidents, and the people of the town did not seem to be greatly inconvenienced by it. Rather they enjoyed it.

The parade started at 2:30 in the afternoon from the club house of the Chicago Automobile Club, 243 Michigan avenue. Both sides of Michigan avenue were lined with spectators and the cars pulled up along the curbs also, while being formed in line by the marshalls. The club house porch, which is wide and high, was well decorated with the club colors, purple and gold, and as soon as the paraders started to form, committeemen began to decorate them with ribbons of red, white and blue, indicating that the wearer of each respective color was a member, a lady or a guest, as the case might be. It was especially thoughtful to label the ladies, so that the community would not make a mistake.

The prettiest picture furnished during the whole run was just before the start, when the eleven score of cars were drawn up between lines of spectators, and the club house



MRS. B. F. LOGAN AND PARTY



C. A. COEY'S DECORATED THOMAS



veranda, as a brightly colored back ground, was thronged with fair women and good natured men. A policeman studied the situation carefully and passed on, leaving the affair to the good graces of a very willing "sparrow cop" with white gloves and a new uniform.

Chicago officials, and prominent personages generally, had been invited as guests of the club and many of them were on hand. Prominent among them were Chief of Police O'Neill, Corporation Counsel Tolman, acting for Mayor Harrison; Park Commissioner Foreman, several aldermen, and Mayor Gates and six aldermen of Wilmette. The latter party was the only representative from the several suburban towns whose officials had been invited.

Jerry Ellis with his big Apperson full of distinguished guests was chief marshal. His scheduled assistants were A. J. MacDuffie, Henry Ullman, W. H. Mason and J. B. Burdette.

The parade was formed with a big Montgomery Ward electric truck just behind the pacemakers, this truck holding the Naval Reserve Marine band. Behind came the gasoline touring cars, then the gasoline runabouts, and following these the steam and electric cars. Commercial vehicles brought up the rear. These included a beer wagon, a furniture van belonging to A. H. Revell & Co., and a half dozen truck of the Chicago Edison Co.

The gasoline cars, of course, predominated, and were out in all of the fifty-seven varieties. A notable fact was that several of these, as well as several electrics, were driven by women. One Knox car held a party of four women. There had been no general attempt at decoration of the cars, but a few of the vehicles were bedecked with flowers. Especially notable in this respect were the cars of Jerry Ellis and C. A. Coey.

The parade started at a leisurely gait up Michigan avenue and turned westward into Jackson boulevard. The western terminus was Ashland avenue, and up to this point the procession was practically unbroken in its formation. At the turning point, however, the scattering began.

The leaders turned north into Ashland avenue to allow a block or more space on the wide asphalt for orderly turning. There was a slight gap between these seven or eight cars and the rest, and when the second bunch came the leader of it, instead of turning north in Ashland, turned clear around right on the corner. The rest of the paraders followed suit, and thus were the leaders cut off. They scrambled back as soon as possible into the line endeavoring to reach the front. Others had the same end in view and the line going back toward the lake was broken into several squads, each interrupted occasionally by the passage of cross-line street cars.

Sweeping into Michigan avenue for the run south to Twenty-second street, the first brigade saw a much clearer street ahead and took advantage of the opportunity. Then did the parade cease to be a parade, and soon Michigan avenue was full of all kinds and sizes of automobiles going south and coming north at paces to suit individual fancy. Almost last of all, the band wagon came swooping gracefully down the boulevard at the head of the commercial vehicle battalion, and these dignified electrics continued on their way south and then back to the club, seemingly unaware of the fact that the parade was substantially at an end.

THE PARADE HEADED WEST ON JACKSON BOULEVARD WHEN NEARING ASHLAND AVENUE

LEADER OF THE COMMERCIAL VEHICLE DIVISION OPPOSITE THE CLUB HOUSE



CHIEF MARSHAL JERRY ELLIS AND PARTY TURNING AT JACKSON AND ASHLAND

WHEN THE SCRATCH BUNCH OVERTOOK THE LIMIT MEN AT THE TURN

Good nature had prevailed throughout and when the members of the club and their guests gathered at the club house after it was all over, it was a very satisfied gathering indeed. Most of the more active ones in the promotion and management of the parade were well pleased in the result and official guests were not backward in expressing their gratification at the ease and certainty with which automobiles could be managed. Chief of Police O'Neill is quoted as saying:

"I had no idea that the high-power automobile was so easy and so certain to be controlled. The machines are more ductile than horses, quicker to respond than any machines I ever heard of, easier on pavements, less noisy and more comfortable than any pleasure vehicles I have ever tried. They go very fast—incredibly fast—but they can be stopped so quickly and so certainly that all danger is minimized."

One of the most fortunate features of the parade was that despite the swift, rather ragged running the cars not only went through without accident or mix-up which would endanger onlookers, but without accident to themselves. The automobiles in line seemed to catch the spirit of the thing and for once, at least, the newspaper alleged funny man looking for a chance to make jokes at the expense of luckless automobilists, was out of commission.

After the parade the club served luncheon in the club house. During this social function President Farson was presented with a portfolio of photographic views of his Oak Park home and its vicinity, these pictures having been taken on the occasion of the club run to Oak Park the previous Saturday.

Just of what permanent effect on the community the parade was is an indeterminable point. As previously stated its breaking up into a good natured scorch served the purpose of showing city officials the many advantages of automobiles for swiftly and safely plying through crowded districts. Such a showing must necessarily produce some results.

City officials naturally prefer friendly demonstration to open warfare, whenever there is a difference of opinion concerning the character of laws.

Being parties to a cheerful function in which 228 automobiles were sent over a 5-mile trip at a pretty fast gait and without any accident or difficulty, they must have gained something of the spirit of automobilism. They must have gained more friendliness for automobilists. They must have discovered that after all automobilists are only men and not a class of freaks. They must have learned that automobiles are ordinary vehicles for ordinary purposes of travel. The effect of the run on the officials who took part in it must have been good.

On the public the effect is more questionable. The public is fickle. It enjoys and smiles at any pageant. It will stop its bustling to watch a dead horse in the street. It was interested in the parade and should have made note of the ease of manner in which the automobiles took their way across town. But after the parade came the evening papers with the story of the ball game and human nature is prone to forget this thing in its interest in that.

The people had been entertained. The entertainment conveyed instruction for those who wished to grasp it.

# MOTOR AGE

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## NO REASONS NEEDED

**M**ANY causes, excuses, objections, etc., etc., might be brought into consideration and discussion relative to last Thursday's fiasco whereby the hope of America's having a team in the James Gordon Bennett international cup race was abandoned.

There is no reason to discuss the situation. We are down and out for this year.

The why and wherefor are of no consequence. The fact exists.

Let it be forgotten as quickly as possible for the best interests of all concerned.

Let America's part in international cup racing be concluded.

Then let a new chapter be started in 1905 under the authorship of the only American national organization—what will be by that time the American Motor Association.

## LAW OF COMMON SENSE

**T**HE times change rapidly. This is an old doctrine, but society is stubborn in recognizing it when an innovation is sprung upon it. Thus the automobile came to remodel all conditions. Society was slow to grasp the situation and put the motor carriage down as a mere interloper. Hence motorphobia, stringent laws and prejudiced newspaper editorials.

Society has commenced to adapt itself to the new order. In substantiation is this editorial from a recent issue of the Cincinnati Enquirer:

So profound a journal as the Philadelphia Inquirer gives currency to this observation: "The most enthusiastic automobilist who ignores speed limits and tries to make a record is apt to be the very man who would resent the slightest infringement on his own life and property, which are protected by laws coming from the same ultimate source as those which control speed."

Of course, this sort of thing must be expected for a good while yet. The automobile is still a rather expensive luxury, though in these prosperous times it is becoming common. It has run through about the same gamut of criticism and objection that have been encountered by nearly every improvement in the means of getting about in the world. It is within the memory of living men when street cars were regarded as a menace to life. Many good but old-fashioned people still say their prayers when they get on a railroad train, not so much perhaps through pious considerations as a fear that a collision or a departure from the track may send them to their final account with an uneasy burden of worldliness. The bicycle has barely survived the public indignation at a vehicle which seemed to them to have

been invented to run into pedestrians and break their bones.

Life gradually adapts itself to these great changes. The rights of the man or woman afoot must be radically preserved, but there is a greater necessity, in the economy of affairs, for the individual to look out for himself a little. The pedestrian has rights. So has the man on wheels. The march of improvement is irresistible. In the judgment of this family journal the time has come when the automobilist must be treated with toleration, if not with polite consideration. The person who speeds about gracefully in a horseless wagon, as fast, say, as a horse can trot, is not necessarily a murderer. It is not plain on the face of things that he is out to run over and crush his friends, or his enemies; but his friends and enemies must look about them when they are crossing the street and not stubbornly stand in the way of the car of progress. This is the age in which everybody must "step lively."

Nor is the large city daily the only one to recognize the change in customs that has begun. Below is an article from a paper of Evanston, Ill., the town of all Illinois towns which has been most drastic in its measures and the enforcement of them. The article refers to the increased speed limit, at the time of writing under consideration and since adopted by the city council. It is as follows:

The proposed passage of a new automobile ordinance, which is at present taking some of the attention of our citizens, suggests a few points which may be of interest to those concerned.

Laws should be made right and then enforced; not made wrong and then left to the discretion of the police officers to enforce them as they see fit.

Laws should be made with regard to the greatest service through the greatest length of time.

Laws are the result of continuous adaptation, and when changed conditions make it apparent that a law is wrong it should be changed.

Apropos of the first of these statements, it can be said that the present automobile ordinance is not right; the speed limit is too low and the member of the police force and of the city council know it is too low. But in order to rectify it they allow the officers on duty to give the scorchers a margin which they think is reasonable. The business of police officers is to enforce the law and not to interpret it, and if the law is such that they cannot reasonably enforce it it should be changed. Almost invariably the autoists arrested have gone far in excess of the speed limit, and at no time have any of them been arrested for traveling anything less than 12 miles an hour. The fact of the policemen allowing the autoists a margin is tacit admission that the 8-mile limit is unreasonable.

With regard to the second of the statements at

the head of this article, it can be said that the present controversy is merely a question of temporizing and allowing conditions to continue which are wrong, or of settling the question and settling it so that operation will be right in the future, and it will be settled for good and all. The number of automobiles in use is constantly increasing, and with the demand for quicker transportation which modern conditions are bringing about the need is for a speed regulation which will last the longest and come the nearest adjusting the differences of both autoists and pedestrians.

When the 8-mile limit was fixed it was thought that it would fill the requirements. Does it? Is it not true that this low speed works an injustice to the owners of automobiles, and is it not true that the changed conditions and the demand for greater speed necessitate a change of the law to meet them?

Surely the reorganization has commenced. It will not be long before motor cars cease to be the "fad of the rich" and become in reality the vehicles of the world's business and pleasure.

## PREJUDICE ONLY TEMPORARY

**T**HE council chamber of Portland, Ore., was the scene of a lively debate last week, when the automobile speed ordinance was discussed. Councilman L. Zimmerman presented a project for an ordinance, limiting the speed to 8 miles an hour and providing a penalty of from \$25 to \$500 for violation of the law.

Fred T. Merrill presented an ordinance providing a speed limit of 12 miles an hour and asked a roll call on the proposition, which was allowed. The 12-mile limit was accepted.

"This proposition should not have been adopted," yelled Zimmerman. "It might have been just as well to make it 20 miles an hour. I would like to know how a policeman is going to arrest a motorist when he is passing at 12 miles an hour? But I don't see that the ordinance can be enforced, anyhow. They are lucky to be allowed to run on the streets at all—the way the streets are now."

"In a few years, when Mr. Zimmerman and the other old mossbacks are gone, there will be nothing else but automobiles," retorted Mr. Merrill.

"Well," replied Zimmerman, "by that time we'll tax you like a dog for being on the streets."

This is a fair sample of the temperament of legislators. It expresses a condition of prejudice which can be only temporary at best. Laws are bound to adjust themselves.

Paris authorities have decided to spend \$300,000 in improving dangerous road crossings, the intention being to lessen the number of automobile accidents. Suppose a good roads advocate were to advance such a reason to a collection of American farmers!

Boston is trying to rival St. Louis; it has just opened its park system to automobiles. On the other hand, the South park commissioners of Chicago have an automobile for official inspection tours—at least that was the reason given for its purchase.

Surprises are coming fast. The results of eliminating trials for the international cup race do not encourage a man to bet much on favorites in the big event.

In the light of the experience of the Chicago Automobile Clubs, future parade managers are cautioned not to give name to the affair until after it is over.

## ONCE AGAIN

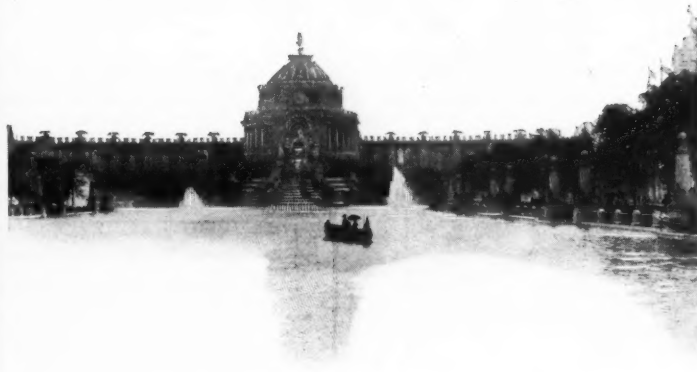
S C O O P E D	<p>The Motor World</p> <p>Automobile Topics</p> <p>The Automobile</p> <p>Automobile Review</p> <p>The Horseless Age</p>	S C O O P E D
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## By MOTOR AGE

the only automobile paper to print in its last week's issue the story of the outcome of the problem of American representation in the international cup race.

The other papers—some of them issuing on *Saturday*—said that this matter *would be settled on Thursday*. MOTOR AGE told how it *was settled*. The only trouble with "beating" the other papers on important news is that it is so easy it has ceased to be interesting.





**MOTOR  
CARS  
AND  
MOTOR  
BOATS**



**IN THE  
ST. LOUIS  
WORLD'S  
FAIR  
GROUNDS**



## FRENCH TRIAL RACE



THEY DRIVING THE WINNING GEORGES RICHARD-BRAZIER

Paris, France, May 21—Very surprising indeed was the eliminating trial race of the candidates for positions on the French James Gordon Bennett international cup race team, for out of the twenty-nine starters only ten survived the six laps of the Ardennes circuit, and of these the three best racers proved to be a rather unexpected trio. Thus Thery, Georges Richard-Brazier; Salleron, Mors; and Rougier, Turcat-Mery, become the French team, and Panhards, Darraeqs, Gobron-Brillies, de Dietrichs, Clements and Serpollets were put back among the tourists, temporarily at least.

The race was run yesterday over the shortened Ardennes course, per schedule except in so far as the dropping out of nineteen cars was concerned. The total racing distance was 531 kilometers—329 1/5 miles—the course of 93 1/2 kilometers being covered six times, and there being five neutralized stretches totaling 5 kilometers in each lap.

M. Thery on the rather light Richard-Brazier took the lead in the second lap and was never sighted thereafter, having the race easily in his hands. Salleron drove a steady, consistent race, taking big chances on the many abrupt turns with his huge Mors and being close to Thery in his total average of speed.

Rougier on the Turcat-Mery was somewhat behind and while easily third was not greatly ahead of Gabriel, of Paris-Madrid fame, who drove a de Dietrich. Le Blon on a Serpollet steamer was fifth; Caillois, Georges Richard-Brazier, sixth; Teste, Panhard, seventh; Farman, Panhard, eighth; Pelser, Serpollet, ninth; and Clement, Clement-Bayard, tenth, last of the finishers.

The Panhards put up a swift race at the start but could not keep up the gait, motor overheating being said to be the cause. The Serpollet cars were surprises, for while they did not qualify they, as steamers, had not been expected to stay with the fast brigade throughout so long a race, and finishing fifth and ninth respectively in such a hard fought contest was greatly to their credit.

The twenty-nine competitors were started in the following order: 1—Gabriel on a de Dietrich; 2—Baras, Darraeq; 3—Henriot, Clement-Bayard; 4—Baron Pierre de Crawhez, Hotchkiss; 5—L. Thery, Georges Richard-Brazier; 6—Le Blon, Gardner-Serpollet; 7—Salleron, Mors; 8—Henry Farman, Panhard-Levassor; 9—Rigolly, Gobron-Brillie; 10—H. Rougier, Turcat-Mery; 11—Charles Jarrott, de Dietrich; 12—Beconnais, Darraeq; 13—Guders, Clement-Bayard; 14—Achille Fournier, Hotchkiss; 15—Caillois, Richard-Brazier; 16—Chanliaud, Gardner-Serpollet; 17—A. Leger, Mors; 18—Teste, Panard-Levassor; 19—Duray, Gobron-Brillie; 20—De la Touloubre, Turcat-Mery; 21—Baron de Forest, de Dietrich; 22—Wagner, Darraeq; 23—A. Clement, Clement-Bayard; 24—Amblard, Hotchkiss; 25—Stead, Georges Richard-Brazier; 26—Pelzer, Gardner-Serpollet; 27—Laverigne, Mors; 28—Tart, Panhard-Levassor; 29—Alexander Burton, Gobron-Brillie.

There were twenty-two French drivers, five Englishmen and two Belgians. The latter were Pierre de Crawhez and Guders. The Englishmen were Charles Jarrott, Alexander Burton, Baron de Forest, Henry Farman and Stead. Only one of the drivers never took part in a road race before, A. Clement. Baron de Crawhez and Teste were the two oldest drivers, having taken part in races since 1897. Henry Farman, Gabriel and Jarrott have previously driven cars in the cup race. Among the heavy car drivers Gabriel, Baron de Crawhez and Jarrott are the winners of the more important road races, having respectively won Paris-Bordeaux, the second Circuit des Ardennes Belges, and the Paris-Vienna races. Gabriel, Baras and Rigolly have won road races on light cars, the former being first in the Tour de France, Baras winning the first prize in his class in the first Circuit des Ardennes Belges and Rigolly getting the first prize in the second race of the Circuit des Ardennes. Thery and Wagner have won important races for voiturettes.

Mazagran, the starting point of the race, is a few miles from Vouziers on the road leading to Paris. At first it had been decided to start from Vouziers, but as this is an important town it was feared that there would be a large crowd at the start and finish and accidents might thus happen. From the starting point to Vouziers, where the first control was located, is only a few miles. The road is straight and level and passes through the village of Bourcq. Quatre-Champs is the next important town. The road leading to it is fine and permits fast driving to the village of Ballay, where there is a railway crossing.

Leaving Quatre-Champs the road turns suddenly and as there are many houses in front the drivers were not able to go very fast here unless they were perfectly familiar with the stretch.

The second control was at Le Chesne. The road leading to it is wide and level with a few slight undulations. At Bouvillmont the third control was established; it is not an important locality but there is a railway crossing and that part of the road is in poor condition, which resulted in the issuance of orders making this point a stopping place. A little way past this village is one of the most difficult parts of the entire circuit. It is in the shape of a very steep and long descent, which continues for several miles. There is also a local railway in construction on part of this grade, which left little room for the automobiles to pass.

After passing this part of the course there are a few miles of good, even road which permitted making up some of the lost time. At Villers-le-Tourneur another bad stretch began, worse even than the previous one. Here is a long turn, almost at right angles and partly invisible on account of houses. After getting past this turn the racers struck a beautiful straight road, several miles long, leading to Novy, where was the fourth control. From there to Rethel, where the last control was located, the road is zig-zag, and careful driving was necessary to avoid accidents. The scenery is magnificent all along this part of the course and is somewhat like that of the German race circuit on which the cup race itself will be run.

From Rethel to Mazagran the road is almost level, hard, and splendidly kept. Being wide enough to hold two cars side by side easily, and three when they are handled with care, it was natural that the fastest times were made on it, the distance from Rethel to Mazagran being about 20 miles. There being several small hills near the finish, spectators were able to see the competitors when they were still more than a mile away.

By order of the prefect of the Ardennes department all traffic on the roads of the circuit was interrupted from 4 o'clock in the morning until 4 in the afternoon. Five thousand soldiers were posted along the course, while twenty-five soldiers on bicycles were on hand at each of the five controls. The crowds at various vantage points were well handled and there was no public confusion to mar the race or to make it a dangerous affair for the spectators.

The stopping time at each of the neutralized controls were as follows: Ten minutes at Vouziers, 5 minutes at Le Chesne, 30 seconds at Bouvillmont, 30 seconds at Novy, and 10 minutes at Rethel—26 minutes per circuit in all.

Of the ten concerns that took part in the eliminating race, six have previously taken part in races with heavy cars, and three with light cars, these being the Darraeq, Georges Richard-Brazier and Clement-Bayard. The Hotchkiss has never before taken part in a race. The Mors and Panhard-Levassor were the only ones which have taken part in the international cup race, and the latter won the race in 1900 with Charron driving and in 1901 with Girardot in the seat.

All of the cars except the Gardner-Serpollet have four-cylinder vertical motors. The steamers have six horizontal cylinders. With the exception of the Gobron-Brillie all the gasoline cars have magneto ignition. The latter, incidentally, used alcohol for fuel.

The race of the ten French makers for representation on the international cup race team may be told in the following brief summary:

Three Richard-Braziers—One qualified, one survived and one did not finish.

Three Mors—One qualified and two did not finish.

Two Turcat-Merys—One qualified and one did not finish.



Three de Dietrichs—One survived and two did not finish.

Three Serpollets—Two survived and one did not finish.

Three Panhards—Two survived and one did not finish.

Three Clement-Bayards—One survived and two did not finish.

Three Darracqs—None finished.

Three Hotchkiss—None finished.

Three Gobron-Brillies—None finished.

Allowing points of 0 for entering and not starting; 1 for starting; 2 for finishing and 4 for qualifying, the comparative scores of the different makes would be:

Georges Richard-Brazier .....	7
Mors .....	6
Tureat-Mery .....	5
Serpollet .....	5
Panhard .....	5
De Dietrich .....	4
Clement-Bayard .....	4
Darracq .....	3
Gobron-Brillie .....	3
Hotchkiss .....	3

### ONLY WOLSELEYS FOR ENGLAND

There may be no Napier in the English international cup race team. After the preliminary trials which resulted in the selection of a Napier and two Wolseleys, S. F. Edge, the Napier driver, protested the selection, as chronicled in MOTOR AGE last week, claiming that Clifford Earp, Napier, should not have been deprived of second position on the team because of his accident at the termination of the trials.

The race committee of the Automobile Club of Great Britain and Ireland met this week to consider the matter, but decided to stand by its previous selection. Mr. Edge consequently refuses to occupy a position on the team, this having been his original threat were his protest not sustained.

If Edge does not drive the team will be composed of three Wolseleys driven respectively by Girling, Jarrott and probably C. S. Rolls.

There is naturally a division of feeling over this matter, but the automobile club's committee is firm in its stand and believes that Mr. Edge should not be given the consideration he seeks, especially since he went about it in a rather unsportsmanlike manner. The club of course would be sorry to have Edge out of the race.

## SEVERE TESTS ABROAD

### Hill and Endurance Contests for Cars and Motor Cycles at Exelberg and Berlin-Leipzig

The annual Exelberg hill-climbing contest took place May 9 near Vienna, Austria. The route was up a 9 per cent grade for about 2¾ miles. This year, on account of the automobile show in the Austrian capital, it was expected there would be a greater number of competitors than in previous years, but the manufacturers were too busy and thus the number of contestants in the motor car classes was rather small. On the other hand, there were twice as many competitors in the different motor bicycle classes.

The meeting was held under the auspices of the Austrian Automobile Club and the motor cycle section of the club. Previous records were broken in an astonishing fashion, by the seconds instead of by fractions. For the first time in the history of the event an Austrian chassis with a German motor won the main race, that reserved for heavy cars. None of the motor cycles developed less than 3 horsepower.

Hyronimus, driving a Spitz car which had a 60-horsepower Mercedes motor, climbed the hill in 4:29½, breaking the previous record of 5:55½. Mauntner in a 40-horsepower Mercedes was second in this heat, which was reserved for heavy cars. Fritz Opel on a 24-horsepower Opel-Darracq won the heat for light cars. His time of 4:46½ is 52½ seconds better than the previous record.

There were three divisions in the motor bicycle competition, the first being for machines weighing not more than 110 pounds, the second for machines up to 145 pounds, the third for members of the motor cycle club. Nikodem on a Puch won the prize in the first division, his time being 4:57½, which was 4½ seconds faster than that of J. Dietrich, second. Wondrich, on a Republik, won the second division in 7:38½ and Lieutenant Stohanzl, on a Laurin-Clement, won the members' race, his time being 5:10.

The endurance test for motor cars and motor cycles recently arranged by the automobile clubs of Berlin and Leipzig, under the auspices of the German Automobile Club, was held May 8. Some of the machines covered the route

from Berlin to Leipzig, while others made the round trip. The latter journey was equal to about 200 miles. Twenty-eight automobiles and forty-two motor bicycles were entered for the longer test, only fourteen cars and twenty-six motor cycles having entered for the run from Berlin to Leipzig.

It had rained for several days previous to the day set for the event, and as the roads were still muddy many prospective competitors did not show up. Of the eighteen cars that started on the long run, thirteen completed the entire journey, while only nineteen of the thirty-four motor cycles that started in the longer run finished. In the short test, eight out of eleven cars finished, while eleven of the twenty-two motor cycles completed the journey.

The cars were sent away two at a time, and at an interval of a minute. Many government officials followed the competition and will make reports of the event. There were few accidents of a serious nature, most of the competitors who did not complete dropping out on account of the conditions of the roads.

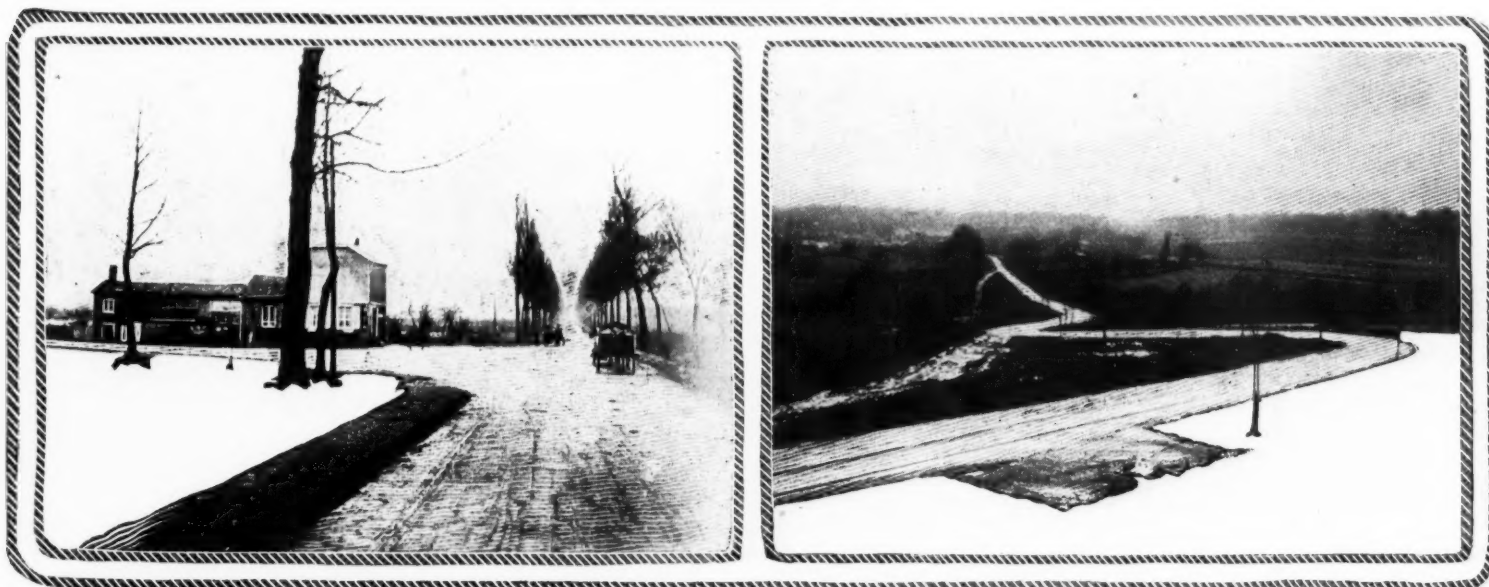
### RIGID FRENCH LAW PROPOSED

The French extra parliamentary committee named last year after the Paris-Madrid race, which is working on a set of new laws to govern automobile traffic in France, recently published a report which has given rise to much discussion in the daily as well as the trade papers.

The members of the committee, among whom are such well known men in the automobile trade as Darracq, de Dion, Max Richard, and Brillie, suggest that automobiles be divided into three classes. In the first, cars capable of averaging 25 miles an hour on level roads should be exempt from numbering and registration.

Cars developing from 25 to 40 miles an hour are designed for the second class, to be numbered and the drivers for such cars subjected to examination before being granted a driving license.

The third class is to be made up of cars above 40 horsepower and not to be sold except on special permission from the authorities. In this class it is designed that drivers shall not be permitted to operate cars without an extra permit, independent of any other permit the driver may already have and which applied for cars of other classes.



TYPICAL STRETCHES OF THE ARDENNAS CIRCUIT, OVER WHICH THE FRENCH TRIAL RACE WAS RUN

## EASTERN RACING GOSSIP

### Motor Age Beat on Eliminating Fiasco Causes Comment—Races at Empire City Track Called Off—Bald Secured to Drive the Ford 999 and May Meet Oldfield in Match

New York, May 23—The fact that MOTOR AGE, which reached this city by the first mail on Saturday morning, contained a complete story of the American team trial fiasco of Thursday afternoon, despite its being well known that the paper's regular going to press occurs a day earlier in the week, created considerable surprise and complimentary comment among New York readers. Since the arrival of the complete story of the New York show last winter ahead of the eastern trade papers themselves New Yorkers have been prepared somewhat for the surprises of Chicago hustle and news printing speed MOTOR AGE gives them when the importance of the occasion demands it. The subscribers to the other trade papers will not read the story until this week, when the news is old and the fraternity has grown weary of any mention of the ridiculous fiasco.

An immediate and much to be regretted outcome of Thursday's fiasco has been the calling off of the meet scheduled for June 4 by President Butler, of the Empire City track. The dispute over the wording of the contract, whereby the Automobile Club, which had previously released the track from all liability arising from accidents, thought to free itself from responsibility, also suggested to the Empire track president the possibility of damage suits arising from future race meet accidents and the difficulty that might arise should he seek to have the contestants free the track from the danger of suits on their account.

Neither Mr. Butler nor Secretary Reeves, be it understood, considered the danger from this source very imminent, nor the difficulty in guarding against it entirely unsurmountable, but in view of the fact that the meet was scheduled more out of friendship for the automobilists and on account of Secretary Reeves' enthusiasm for automobile racing than as a business enterprise, Mr. Butler called the meet off and Secretary Reeves made no effort to induce him to change his decision. As a matter of fact the Empire management is busy preparing for its grand circuit trotting meets at the Yonkers and Brighton tracks and did not care to trouble itself very much to consider the question of possible damage suits and providing against them. It is probable that when the August trotting meets are over Secretary Reeves will be glad to bestir himself in the promotion of a metropolitan meet.

Automobile track racing advocates here do not fear any great impediment to circuit competition from the hastily determined precedent set by the Empire track management, whose action was taken really more from outside reason and off-hand disgust at the team trial fiasco than from any great fear of damage suits. If the tracks demand indemnity against damage suits from clubs running meets it is suggested that a clause on the entry blank releasing the promoter from liability will meet the emergency so far as the contestants go and be readily signed. Proper precautions in the way of keeping the spectators from the fences, such as the wire barriers

employed at the Empire track on these race meet occasions, would really seem to pretty effectively obviate all danger to them.

It seems practically assured now that Eddie Bald will leave the employ of the Electric Vehicle Co., at whose factory he has been for 2 months, studying the mechanism of the Columbia gasoline cars, to drive the Ford 999 in track races and exhibitions. In a trial spin one day last week on the Charter Oak course Bald, inexperienced as he is yet at the track speeding game, drove the Ford flyer a mile in 1:01 3-5. W. H. Pickens, the present owner of 999, who will be his manager, thinks he has found a great chauffeur in the former cycle champion and will seek to match him against Barney Oldfield. The rivalry between the two is likely to make track racing history the coming season. Bald will drive 999 an exhibition mile at the Hartford meet Decoration day, preliminary to touring the country.

The 60-horsepower Fiat international cup model racer, which Claude Fogelin will drive at the Readville meet Decoration day in the free-for-all for the Boston Herald cup, arrived at the Hollander & Tangeman garage Wednesday. Fogelin has tried the machine out a bit on the suburban roads and is highly pleased with it.

Another New York competitor at the Boston meet of which much is expected is the Nathaniel Huggins 40-horsepower Decauville. Mr. Huggins circled the Empire track with it last Thursday in 1:13 3-5, and later Hilliard, his chauffeur, who will pilot the car in its races, scored 1:11 2-5, the fastest mile of the day, despite the soft condition of the unrolled track.

Barney Oldfield has made engagements to ride at the Philadelphia meet on Saturday and the Boston meet on Monday. After these races he will go west and ride on the tracks there until the eastern track circuit opens in the autumn. He says he will race Eddie Bald and Ford's 999 on any track at any time.

Louis P. Mooers denies the story that the 1904 Peerless cup cars will at once have tonneaus put on them and be sold as high powered touring cars. He told a MOTOR AGE man on Saturday that they would have their speed shown on the track circuit before they were converted into mere pleasure cars.

W. Gould Brokaw has bought the 60-horsepower Fiat racer, which Fogelin will drive at the Boston meet.

#### BOAT TROPHY COMPLETED

The trophy for the race between Hollander & Tangeman's boat Fiat and Smith & Mabley's Vingt-et-Un has been completed by its makers, Tiffany & Co. The cup weighs 1,132 pennyweights and stands, with the green onyx base, 20 inches high. On the cover is a figure of Victory, with a wreath of laurel in her raised

hand. Around the top of the cup is a decoration of seaweed in green gold, in which are set moonstone, zircons, sapphires and tourmalines, so arranged that any three are either the American or Italian colors—red, white and blue, or red, white and green—the firms giving the cup being agents for automobiles and boats made in those countries.

Chased in relief on the side of the cup are the private signals of the firms, crossed, and beneath is a decoration of seaweed in green gold. The body is connected with the foot and partially supported by four dolphins. The foot is ornamented with seaweed in green gold. On one side of the onyx base is a miniature model of the Fiat and on the other Vingt-et-Un, both of which were made from measured drawings. On the front of the base, and connected with the boats by a gold band which passes all the way around, is a graceful shield bearing the inscription.

#### PLANS FOR ST. LOUIS TOUR

Augustus Post, of the St. Louis tour committee, has been investigating the road conditions and making contracts and arrangements on the road between St. Louis and Columbus, and will make a report on the roads, garages engaged, hotels, etc., on his return to New York this week. Frank Mudd, of the Chicago committee, has recently gone over the road between Chicago and Joliet. Mr. Mudd also went over the route from Springfield to St. Louis with Mr. Post and found the roads, although rough, in good condition. Colonel Loose, the committeeman at Springfield, Ill., has rented the Dome building at the state fair grounds as a garage to be used Friday, August 9.

It has been decided that a trail of confetti will be laid the entire distance over the route selected. The manner of laying this trail will differ in some details from that pursued by the managers of the endurance run. Instead of using through pilot cars, the committee has decided to have the confetti taken by special cars from each stop to the next stopping place. The confetti cars will be in charge of local automobilists, who know the road thoroughly to the next stopping point. They will start either the day before the tourists or on the morning of the same day.

The road commissioners of Fayetteville, N. Y., have notified local representatives of the committee that they will make special repairs on the road between Fayetteville and Syracuse just before the tour. They give assurances that this will give a stretch of 8 miles, free from ruts and sharp stones and in as good condition as possible.

Investigations made during the past week by Secretary Butler, of the A. C. A., of the roads to Gettysburg have proved that a change of route between Philadelphia and Gettysburg will be necessary. The committee has taken up this matter and it is reasonably certain that the itinerary for this portion of the Philadelphia-Pittsburg division will be changed. Instead of going through York and Lancaster, the tourists will run from Philadelphia to Reading and Harrisburg and thence to Gettysburg. This will give uniformly better roads and more satisfactory running condition than were the other roads taken.



S. & M. FIAT BOAT RACE CUP



## EXPLORED OLD ORCHARD

### Beach at the Popular Maine Resort Found Suitable for Only Two and Three-Mile Races

Boston, May 23—It has been proposed by prominent automobilists to make Old Orchard beach, Me., in summer what Ormond is in the winter to lovers of fast driving and racing. Already plans for a week's tournament are under way in which all the prominent racing men of America and Europe will be invited to take part. Reports that H. L. Bowden, of Boston, and S. B. Stevens, of Rome, N. Y., both of whom figured prominently in the Florida tournament last winter, were already matched to race over a 15-mile course on this beach, have been sent broadcast. Up to date, however, no official investigation of the beach has been made to determine its suitability for fast driving with heavy machines, nor, so far as is known, had any test been given that vast stretch of sand by men capable of judging its merits for racing purposes until Sunday, May 15.

On that date George H. Lowe, of the Massachusetts Automobile Club and the Chronograph Club of Boston, accompanied by Walter Schmonk, who has had experience in driving fast cars on beaches in both America and Europe, and J. S. Hathaway put in a day there exploring and giving the beach a thorough try-out. The three left Boston in Mr. Lowe's White steamer and drove over the road throughout the night in order to arrive at the beach at low tide, which occurred in the morning at about 6 o'clock. The morning was gray and misty, while a strong northeast wind raked the beach, kicking up a sea and chilling the explorers.

Mr. Lowe and his companions found a stretch of sand 16 miles in length, but cut up so by various obstacles that it would not be possible to obtain a straightaway speedway long enough to hold the proposed 15-mile race between Bowden and Stevens without making turns. A 3-mile course could be laid out and possibly a 5-mile stretch for some of the more daring drivers, but no more. A pavilion runs directly across the beach opposite Old Orchard railroad station and it is this structure with its huge iron posts embedded in the sand at intervals of every 10 yards that spoils the beach for a 5-mile straightaway unless the operators would care to run chances of running their cars at high speed between the iron posts.

On the north of the pavilion there is, however, a smooth, hard stretch of sand 3 miles in length, brought to an end only by a narrow, shallow creek. At low tide the explorers found this to be from 400 to 500 feet wide and as hard as asphalt—so hard, in fact, that the tires of their heavy steam touring car failed to leave the least impression on the sand.

The 2-mile stretch south of the pavilion is

just as perfect. This stretch extends at least 2 miles further but for a straggling group of rocks that makes its way across the beach. If this could be removed the stretch would be the proper course on which to hold the speed trials.

The 3-mile course could not be improved upon. Even under the adverse weather conditions in which the explorers found it, with the heavy mist and high sea running, they were able to glide over it without a jar at a rate of 30 miles an hour. Even within an hour of high tide Mr. Schmonk found it possible to pilot his car along at a fast clip high on the beach, where on most sandy stretches it would have been soft and not capable of holding speed. No wreckage obstructs this stretch, and it is free from knolls of clay so often apt to protrude above the surface on northern beaches.

The approaches to the beach are bad at pres-



THE ROCKS WHICH MAR OLD ORCHARD BEACH

ent, but could be easily remedied by making a runway of boards over the soft sand high on the beach. The roads in the vicinity of the beach are all good, while the beach itself so far as scenery goes is one of the most beautiful on the Atlantic coast. Accommodations at the beach in the summer are of the best, there being a dozen first class hotels. It is a popular resort for New England and New York people during the summer months.

Should the automobile tournament there turn out to be a reality it is sure to meet with the hearty support of the inhabitants and summer visitors, and it would have the advantage of being within easy striking distance of the White mountain resorts and Boston. The roads to Old Orchard from Boston are good as far as Portsmouth, and will be in good condition all the way when they become a little more settled. Even in the rain Mr. Lowe and his party were able to make the trip home in 7 hours. The distance is 131 miles.

### CALIFORNIA MEET POSTPONED

San Francisco, Cal., May 20—The race meet and automobile show scheduled to take place on the Ingleside track June 3 and 4 has been postponed until some time in August. The racing committee of the Automobile Club of California consisting of L. P. Lowe, chairman, S. G. Buckbee and Charles C. Moore had been preparing the program for the 2-days' meeting, and although a great many enthusiasts were anxious to have the affair turn out successfully there were others who said the time selected for holding the exposition and races was not good and they favored a later date.

## BOSTON READY FOR MEET

### Big Parade Saturday and Races Monday Causing Unusual Interest Among New Englanders

Boston, May 23—The automobile parade and races of the Massachusetts Automobile Club, to be held on Saturday and Monday, respectively, will make the greatest automobile carnival ever held in this city, and one which cannot but have a wholesome effect upon the powers that be. The parade promises to be more successful than was at first imagined. Already the entries of some of the best known machines in this section have been received, and many distinguished men and state officials have accepted the invitation to be the guests of the club on this occasion. The route will be through the greater portion of the park system, which has but recently been thrown open to the use of automobilists.

While Chairman William Wallace, of the race committee, has been exceedingly busy with the parade matters, he has not forgotten all about the races, but is keeping his hand in at the racing program. The success of the venture is already assured, not only by the special match between Bowden and Hills, but also from the list of excellent entries received, which include so far Claude Fogolin and his Fiat; Louis P. Mooers, C. G. Wridgeway, Joe Tracy and the three Peerless cars; Harry Fosdick and the Baby Bullet; the Decauville racer; the Pope-Toledo, the Nestrom Spider and a lot of others.

The Boston Herald trophy race is attracting entries. A race arranged yesterday was a special match at the 10-mile distance between Morrison and Eldridge, both of whom agree to use stock Peerless and Pope-Toledo cars, respectively.

The entry of Claude Fogolin, the Italian driver, has also been received and his racing car reached New York Friday morning and will be sent to Boston tomorrow. H. E. Rogers, of Newton; Harlan W. Whipple and several other well-known persons have made entry for the open events, as well as Otto Nestrom, the owner and driver of the Stevens-Duryea Spider.

The touring class race is attracting no end of attention, and will find one of the largest fields of private cars entered, as will also the race open to all members of recognized automobile clubs in New England. The desire to capture this latter race is keen. Wallace is so anxious to win this contest that 2 weeks ago he cabled for a 30-horsepower car, to be known as Black Beth, which will arrive in this city some time this week.

Harry Fosdick has presented a silver loving cup, known as the Fosdick cup, to be awarded to the man who shall make the fastest mile of the afternoon, whether it be the first or intermediate mile.

## ONLY THE WESTERN WAY

### California Motorists Persuaded To Stop By Means of Revolvers—Trade Conditions Good

San Francisco, Cal., May 20—Fred Smith and a few other local motorists had a little incident to tell the other day when coming back from a spin out in the country. Smith is a student of the Stanford university and with some friends went out on the roads between Menlo park and Redwood City. When about half of the distance over the route had been run, they caught up with a buggy which had two occupants. Smith tooted, but the stubborn driver in charge of the slow outfit did not budge. The road was wide enough for the car to pass, but Smith did not wish to frighten the horse. A little more tooting, and this was followed by the driver of the buggy flashing a wicked-looking six-shooter at the automobilists. "Don't try to pass or I'll blow your brains out," were the words that reached Smith and his friends. Instantly the automobile was brought to a standstill and the buggy drove on. This incident shows that there are still many horsemen in this state who are very hostile to automobilists.

C. H. Bell, of Los Angeles, made a splen did run some time ago in a Thomas Flyer, and will leave a few days hence to make journey south. "The first night after leaving the southern city it rained heavily," said Mr. Bell. "The roads were something awful, especially between Santa Barbara and Govioto, but I went through after having to slow up somewhat, and got into a dry zone looking like a frog coming out of a mud hole. During the remainder of the voyage there were no unpleasant happenings and now I intend to return over the route."

L. R. Mead, proprietor of Byron hot springs, made a trip to the springs last Saturday, returning Sunday. This trip was really one of inspection, as the hotel management desires to establish an automobile road from San Francisco to the springs for Frisco motorists. The distance is 75 miles by way of Livermore, and the roads are level.

Trade continues to be brisk and it would be difficult to say which kind of motor car is the most in demand—the runabout or the touring car. It is not a case of one dealer selling a lot of cars, but all are doing well.

The Pioneer Automobile Co. finally received by express last Friday a sample of the Oldsmobile touring car. President Brinegar says that since the arrival of this machine both himself and his entire selling staff have been working until midnight showing the machine to out-of-town agents and customers who have placed orders with deposits for this machine.

The recently organized California Association of Chauffeurs is doing good work and is at present circulating a petition looking to the blacklisting of operators found guilty of reckless driving. The owners of automobiles are giving the C. A. C. all possible support.

### LICENSED UNDER CONDITIONS

Washington, D. C., May 21—An inkling of what may happen to the sight-seeing automobiles used in this city if it is found they cut up the asphalt pavement during the summer months was given at the district building this week when the commissioners acted favorably on the application of the Seeing Washington

and Mount Vernon Auto Co. for a license to operate one forty-passenger electric vehicle and one twenty-five-passenger vehicle of the same type. The license was granted subject to revocation if it is found that the use of such vehicles causes damage to the asphalt pavements. Whether such damage is caused will be easily determined when the hot weather sets in. When that time comes the officials on the engineer department of the district government will make a study of the matter.

At the present time there are three incorporated companies operating sight-seeing automobiles in Washington, and another one has just been incorporated for the same purpose. It is the Seeing Washington & Mount Vernon Auto Co., which was incorporated by Frank C. Berens, S. B. Emmert and Emile P. Nussbaum, with a capital stock of \$30,000. The company will operate two big electric vehicles and will not only run them around the city but will also carry passengers to Mount Vernon, the old Virginia estate of George Washington, where is located the tomb of the immortal Washington and his wife. Thousands of people go to Mount Vernon every year and the new automobile company hopes to get a good share of the carrying trade.

### MOTOR CYCLISTS TO ORGANIZE

Syracuse, N. Y., May 21—That motor cycling is coming more into public favor is proved by the steadily increasing number of local riders who are taking up the sport and who speak enthusiastically of its pleasures. Definite steps have been taken by Syracuse cyclists looking to the formation of a club among the twenty or more devotees of the power-driven machines in this city, and while an organization has not yet been perfected, it is likely that within a short time such a club will be formed. Last year's runs were held to Oswego, Pulaski and other nearby places and it is intended to promote similar tours this season.

### MAYOR FOBES' MUD PARTY

Syracuse, N. Y., May 23—Mayor Fobes' automobile outing to the members of the common council and heads of city departments last Friday afternoon and evening turned out to be an endurance run rather than a pleasure trip. The 15-mile trip to South bay on Oneida lake, ordinarily a quick run, was accomplished only after many difficulties had been encountered. The many difficulties were the bad condition of the 10 miles of plank roads and the 5 miles of dirt road beyond—a toll road at that.

The start was made at 4:15 o'clock in the afternoon. Eleven cars set out one after another. The twelfth did not show up, and Mayor Fobes and three of his guests rode in a carriage, and under the circumstances considered themselves lucky. The first party out had two breakdowns before getting through the north end of the city, where sewers are being constructed, and a third at North Syracuse. The last was after all others had passed them, and as the banquet was over at that time, they started to walk back to the city through a pouring rain, reaching a trolley car just as the others were coming into the city in their automobiles.

One feature of the trip was the friendly racing spirit among the drivers and some lively brushes were had. J. A. Seitz, equipped with a repair outfit and who started last, was among the first to arrive, having made the run in 20 minutes.

## GETTYSBURG TOUR PLANS

### Thirteen Cars Already Entered for the Trip to Atlantic City and Pennsylvania Battlefields

New York May 23—Preparations for the spring tour of the Automobile Club of America to Gettysburg and Atlantic City are now complete. The arrangements have been made by Secretary Butler with his accustomed thoroughness of detail. The tour will last 8 days, during which 634 miles will be covered.

Up to this afternoon thirteen members had enrolled their cars as follows: W. Ross Proctor, Renault; Dr. C. T. Adams, Autocar; R. A. Greene, Locomobile; John A. Hill, Panam; Frank G. Webb, Wilton; J. M. Waters, Panhard; M. Milo Redding, Jr., Peerless; W. D. Gash, Ford; Henry B. Joy, Packard; Robert Lee Morrell, Locomobile; Emerson Brooks, Cadillac; R. M. Owen, and E. T. Davis.

The itinerary of the tour, as announced by Secretary Butler after his run over the course last week, is as follows: Thursday, May 26, New York to Philadelphia, 102 miles; Friday, May 27, Philadelphia to Harrisburg, via Reading, 114 miles; Saturday, May 28, Harrisburg to Gettysburg, lunch, 38 miles; Sunday, May 29, morning and luncheon in Gettysburg, afternoon run from Gettysburg to Harrisburg, 38 miles; Monday, May 30, Harrisburg to Philadelphia, 114 miles; Tuesday, May 31, Philadelphia to Atlantic City, 60 miles; Wednesday, June 1, Atlantic City to Asbury Park, 93 miles; Thursday, June 2, Asbury Park to New York, 74 miles.

The headquarters of the tourists at their night stops will be: Philadelphia, Hotel Flanders; Harrisburg, the Commonwealth; Gettysburg, Hotel Eagle; Atlantic City, Hotel Windsor; Asbury Park, Hotel Brunswick. It was originally intended to make the last night's stop of the run at Lakewood, but it being impossible to obtain satisfactory hotel accommodations the change was made to Asbury Park, where the tourists will have a chance to view the notable improvements on the beach, marking the town's release from the thralldom of Bradley.

Arrangements have been made for a guide to take members over the Gettysburg battlefield. The park has 25 miles of superb macadam road and cars may be driven to the summit of "Little Round Top" from which an extended view of the battlefield and the surrounding country may be had.

It is expected that the tourists will be escorted by a considerable contingent of fellow members as far as Philadelphia on the first day's run and that a number will meet them at the Hotel Flanders on Monday night, where an informal dinner has been arranged for. Another party is likely to meet the returning tourists at Asbury on Wednesday and accompany them on the run home.

### THUGS STONE MOTORISTS

New York, May 23—In view of the outrageous and unprovoked assault Monday on W. S. Gotshall's automobile party as it was passing through an east side street by a band of hoodlums, during the course of which a stone thrown by a boy, not yet captured, struck Mrs. Gotshall and may cause her death, Police Commissioner McAdoo has responded to the public outcry in the matter by promising that on holidays he will detail po-



licemen to guard the streets leading to and from the Long Island ferries, where these attacks have long been the subject of complaint.

Mr. McAdoo is quoted as having spoken today as follows:

"Many complaints have come from owners of automobiles and dealers to the effect that they have experienced considerable trouble on One Hundred and Fourth, One Hundred and Sixth, One Hundred and Tenth and Thirty-fourth streets in Manhattan, and Fourth avenue in the vicinity of the Thirty-ninth street ferry in Brooklyn, on account of the presence of an unusual number of children at play in these thoroughfares. Missiles have been thrown at automobilists, and general resentment by children and parents has been shown over the presence of the vehicles. The streets particularly complained of lead to the routes most favored by automobilists on Long Island.

"A prominent man visited me to-day and showed an envelope containing six tacks. He picked the envelope up on the roadway in Brooklyn. The tacks were point upward. Such is the opposition to automobiles.

"I appreciate the rights of the children as much as I do the rights of those who ride in automobiles, and to the end that both classes may be served I will talk with Inspector Cortwright and consult with him in reference to choosing several eastbound routes on the upper and lower east side and in Brooklyn which automobiles may best use on Saturdays, Sundays, holidays and other days when there is unusual automobile traffic. The routes will be chosen with a view to advantageous police protection. I propose to talk with the automobile dealers about it, too."

#### WANT ROADS IMPROVED

Pittsburg, Pa., May 23—Automobilists are agitating the matter of having the roads in the famous Sewickley heights district macadamized. At present there is only one macadamized road in the entire district, the one leading from Sewickley to the Country club. At least a half-dozen other roads 2 to 4 miles long in the district are known as the most beautiful drives in Allegheny county and lead by the country places of Pittsburg's wealthiest men. Last year a movement was started to have them macadamized, but nothing came of it. This year both the automobilists and the property owners are determined to have some of the work done, and it is thought that the Glen-Mitchell road and the Little Sewickley creek road will be improved before fall. In their present condition the roads are muddy in winter and rough in summer, making them unfit for automobiles. If they were macadamized the district would become a favorite rendezvous for the automobilists both from Sewickley and Pittsburg who are now deprived of the beautiful scenery.

The practice among business men of driving into town in an automobile and having it stored during the day is increasing rapidly. Two years ago hardly a business man could be seen downtown during the day time, many of them fearing to drive the big machines among the crowded streets. Now over fifty of the most wealthy motorists in the city make regular trips to town in the morning, have their machines stored during the day and after business hours take a spin around the boulevards on their way home. As fast as improvement of the roads goes on, so will motoring be popularized.

## ROAD RECORDS GO AGAIN

### Times from Boston to New York and Return Receive Another Drubbing from Fosdick

Boston, May 23—The Boston-New York-Boston record, established some 2 years ago by Kenneth Skinner, has been fractured and likewise the one-way record recently established by R. A. Green. Both these marks fell during Saturday and Sunday, Harry Fosdick causing a revision of the record table. C. A. F. Phizzenmayer, of New York, also got into the record-making game and established a new New York to Boston mark, the same being done yesterday morning.

Fosdick's elapsed time to New York was 10 hours 20 minutes, and the actual running time 8 hours 34 minutes, which improves upon the Green record by 7 minutes, and the gain was made at different points along the route. The elapsed time to New York was 3 hours 2 minutes better than the record established by Skinner 2 years ago, while the elapsed time of 21 hours 55 minutes for the round trip made by Fosdick is 13 hours better than the best previous performance, the actual time for the return trip from New York being 9 hours 53 minutes running time, and 10 hours 24 minutes elapsed time.

Phizzenmayer has a mark of 10 hours 25 minutes elapsed time and 8 hours 42 minutes actual running time, which beats both the Green and Fosdick records for one way, but from his elapsed time has been deducted certain times he lost while making an unintentional trip to Munson, which is off the direct road to Boston from New York, and which caused him some time.

The record work commenced at 12:35 o'clock Saturday, when Fosdick, accompanied by Fred Shaw, left Boston after being checked by H. A. Githens, and headed for New York. The going was fast, but the Winton car was equal to the task and reached Worcester at 2:03 o'clock. Here a loss of a couple of minutes was made on account of having to stop for a train, but this time was not deducted from the elapsed time. From Worcester to Springfield the same pace was continued and the heart of the commonwealth reached at 3:50. Sixteen minutes were lost here in getting gasoline, the party being checked by Frank Fowler and H. T. Farr. At 4:06 the pace was renewed. Five miles this side of Hartford the car broke a front spring and Hartford was reached at 5:10 o'clock. Here 45 minutes was lost in changing springs, a new one being secured by dismantling a new stock car, and at 5:55 the party was again on its way to New York, reaching New Britain at 6:23, Meriden at 6:50, and New Haven at 7:35. At New Haven 20 minutes were taken out to replenish the oil and attend to the lamps, and at 7:55 the run into New York was started.

Bridgeport was reached at 8:35, the party here being checked by J. H. Meddough, of Boston, who happened to be in that city. Five minutes were taken for refreshments at Bridgeport, this being the first time the record breakers had had an opportunity to get a mouthful. Central bridge was reached at 10 hours 55 minutes elapsed time and 8 hours 54 minutes actual running time, so that both the elapsed and the actual time records were

reduced. The arrival at New York was checked by Mr. Phizzenmayer and Percy Owen. The party then went across the bridge to the hotel and got a little lunch, coming out in season to check Mr. Phizzenmayer when he started for Boston at exactly 12 o'clock. Six minutes later Mr. Fosdick started back home, and although he had constant signs of Mr. Phizzenmayer being in front, he never saw him after he had started.

Mr. Fosdick reached Bridgeport on the return at 2:55 and New Haven at 4:05. He left the latter place at 4:20 and reached New Haven at 4:05. He left the latter place at 4:20, stopping 15 minutes to replenish oil and attend to his lamps, reached Hartford at 5:50 and Springfield at 6:45. Springfield saw another stop of 5 minutes, and 11 minutes more added to the amount of elapsed time at Worcester, which was left at 8:50. The run to Boston was made in good order, and Mr. Fosdick reached here at 10:24, the time for the last half being 9 hours 53 minutes, and the elapsed time 10 hours 24 minutes, which gives him for the round trip the elapsed time of 21 hours 55 minutes, and for actual running time 18 hours 47 minutes.

Mr. Phizzenmayer's ride to Boston on his Locomobile must not, however, be overlooked, since it is deserving of considerable credit. The trip was caused by a little side bet, he having gone out to Central bridge, New York, to check Mr. Fosdick. Phizzenmayer left New York exactly at midnight and did not stop until he reached Westbrook, where he spent 45 minutes attending to the wants of the inner mortal as well as replenishing gasoline. Thirty minutes more were lost at Hartford, and the remainder of the time deducted from the elapsed time to get the actual time was lost on account of the New Yorker's going into paths that were not on the road, or, in other words, making unnecessary side trips. He reached Boston, being checked at the B. A. A., at 10:25 yesterday morning, that time being his elapsed time, from which was deducted the time lost, giving an actual running time of 8 hours 42 minutes, which is better than is claimed by either Green or Fosdick. This was Phizzenmayer's first attempt at record breaking, but from the showing he made it is not the last.

#### PARADE READY TO MOVE

Cleveland, O., May 23—The committees of the Cleveland Day Nursery and Free Kindergarten Association and the Cleveland Automobile Club have announced the route and arrangements for the street parade to be held in connection with the automobile carnival on June 8. The parade will start at the corner of Euclid avenue and Perry street and pass down Euclid to the Public square, pass around the Public square, out Superior to Erie, then to Euclid, thence to the Boulevard, and finally to the Glenville track, where the cars will pass the grandstand four abreast. The first division will be composed of electric vehicles, the second division of runabouts of all powers, the third division of light touring cars, the fourth division of heavy touring cars and the fifth division of mercantile wagons. The procession will move at 1 o'clock. Mayor Tom L. Johnson will head the parade as chief marshal, assisted by Ralph Owen. Walter Baker will direct the first and second divisions, and George S. Waite and Clarence Brockway the third, fourth and fifth divisions.

## RENTING TRADE BRISK

### Ohio Companies Establish Lively Trade in Pleasure Cars for Hire—New Explosive Tried

Cleveland, O., May 23—Renting of automobiles has developed into quite an industry in this city. A couple of years ago two or three local dealers attempted to conduct rental departments in connection with their business, but it did not prove successful. The demand was not heavy enough to warrant keeping cars in commission for such service, primarily because the business was not properly advertised and because prices were too high. This spring two concerns have been formed that are making an exclusive business of renting cars and they seem to be making a success, as they have gone about it in business-like manner.

The Cleveland Automobile Transfer Co., W. B. Drown manager, has four Winton touring cars in constant commission and they are kept busy a greater portion of the time. The J. M. Reed Auto Livery operates Stearns cars seating five passengers and is also doing a good business. Mr. Drown has an arrangement with the Hollenden hotel whereby orders for rigs are taken at the desk, while Mr. Reed has a similar arrangement with a Bond street pharmacy. Both concerns have their "stamping ground" in the vicinity of the Hollenden hotel and machines bearing a sign "This Car for Rent" may be found at that point at all times. Sometimes the competition for business is rather keen and the cappers for the two concerns have rather heated arguments about the advantages and disadvantages of cars with or without tops; or the superior speed and reliability of this or that car. Both concerns have the same scale of prices—\$5 for the first hour and \$4 an hour thereafter or \$10 for a park drive covering the afternoon.

A great deal of interest is being evidenced by local operators dealers and manufacturers in a series of tests being made with the new fuel known as Energine. As has been previously stated in these columns this fuel is being manufactured by the Energine Co., which was formed in this city some months ago. Lately the company has completed a refinery and is now producing about 200 barrels of the product per day. A number of the local dealers have been supplied with the fuel and are selling it to local patrons, and the reports coming from people who have been using the product for every day work indicate that claims for Energine are being substantiated.

The new fuel is a laboratory product, petroleum of course being the base. It is more highly refined than gasoline. It lacks the oily appearance and feeling common to nearly all grades of gasoline and it leaves no odor or carbon after being exploded. The manufacturers claim that the explosive mixture produced is much more powerful than that derived from gasoline and, although the product costs more than gasoline, it is claimed to be more economical in the long run.

An interesting test was made with Energine the other day by R. H. Magoon, agent for the Pope-Toledo. He used a Pope-Toledo two-cylinder car and first covered a certain course through the parks and boulevards using 68 test gasoline. He then cleaned out the tanks and went over the same course in practically the same time using Energine. In the first trip

he used 10 pints of gasoline and on the second trip 6 pints of Energine, which would indicate a saving of 40 per cent for the Energine. He stated that immediately after starting with Energine he had to cut down his carburetor and he noticed that the machine seemed speedier and livelier than before. Mr. Magoon has supplied the product to several customers, who are greatly pleased with the results.

Even better results were shown for Energine in tests made by the Ohio Motor Car Co., which reported a saving of 42 per cent in the amount of fuel used as compared with 68 test gasoline.

The Energine company plans to erect refineries in other cities and claims that the demand already indicates a great future for the product.

### NEW SYRACUSE COMPANY

Syracuse, N. Y., May 23—As a result of negotiations which have been going on for a year, announcement is made by the chamber of commerce that wealthy New York men are likely to come here and build a mammoth plant for the construction of motor coaches of the automobile type for passenger purposes, special vehicles being manufactured for hotels, railroad stations and sightseeing purposes.

The offer to locate in Syracuse is made on condition that local capital to the amount of \$100,000 be subscribed for the erection of a factory, the subscribers to receive in return 6 per cent gold bonds. The New York backers agree to supply all the working capital, patents and designs, sell their own stock and furnish funds for that expenditure. It is understood that the capital will be large. None of the coaches to be built will sell for less than \$10,000.

Officers of the chamber of commerce are hopeful that the desired amount for a building may be raised. The matter will be brought up and determined at the next meeting of the organization. In case the company locates here it is specified that a plant of sufficient proportions to accommodate 500 workmen be built. There must be ample room for any future growth of the concern in the way of land for additional buildings, and also there must be good switch connections with the railroads. The company proposes to start work with 100 men, and the vehicle which it proposes to build, it is said, will be larger than any similar vehicle in the world. One model is called the Standard passenger coach, a double-deck affair to carry between thirty and forty passengers and operated by electricity or gaso-electric power. The company is said to be willing to guarantee that all the money derived from the sale of bonds will be used exclusively for the erection of a plant.

### BRITISH EXPORTS AND IMPORTS

Official statistics show that during the first 4 months of this year 1,924 motor cars were imported into Great Britain. Their value amounted to about \$3,141,440, or an average of \$1,632 per car. During the same period only 217 British-made vehicles were exported, and their value was about \$441,320, an average of \$2,034 per car. Motor cycles to the number of 457, valued at \$73,855, or an average of \$162, were imported, while a total of 265, valued at \$50,915, or an average of \$192, were exported. The value of parts imported during the first four months of 1904 was \$39,552, against \$10,185 worth of exported parts.

## ROAD CONVENTION OVER

### Meeting at St. Louis Adjourns After Adopting a Platform and Electing Officers for the Year

St. Louis, Mo., May 23—The national and international good roads convention is over. It adjourned after 6 days of conscientious work in favor of better roads, and if after this noticeable improvements are not made it might well be asked what must be done to get the people who are in a position to help this movement interested in road improvements.

Never have so many eminent men met for a common cause; never have the addresses of these men been so serious, so earnest, so logical. The fact that several of the nation's highest officials took an active part in this meeting seems to indicate that the unceasing efforts of the good roads officers will be rewarded by the participation of the government in the movement.

The last day of the convention was noticeable for two events—the election of officers and the adoption of the platform. The old officers were unanimously re-elected, as follows: President, W. H. Moore, St. Louis; secretary, W. H. Richardson, Nebraska; treasurer, C. H. Huttig, St. Louis. Besides these officers the following members form the executive board: Elliott Durand, Chicago; Albert Blair, St. Louis; Russell Harding, St. Louis; A. S. Mann, Florida, and Martin Dodge, Washington, D. C. The following platform was adopted:

The National Good Roads Association of the United States, in national and international convention assembled, believing that the improvement and maintenance of our public highways is of paramount importance to the economic welfare and development of our country,

Resolved, That this convention heartily indorses the proposition of federal aid for the construction of public roads in the United States to the extent of one-half of the cost of same, and that each delegate in this convention pledges himself to use all honorable means to secure the support of our respective delegates in congress of this principle.

Resolved, That, believing, as we do, that the road question is a paramount one now before the American people, we urge that in the election of all public officers they be required to stand for federal aid for road improvement generally.

Resolved, That this convention unanimously indorses the proposition of county, state and national aid.

Resolved, That we heartily approve and commend the work of the office of public road inquiries of the United States department of agriculture in collecting and disseminating information and co-operating with committees in object lesson and experimental work. We believe that its practice of road building has been far-reaching and will prove of immeasurable value to the people. The demand for better methods and greater light is insistent and general throughout the country. While the office has accomplished a prodigious amount with the limited means available, it has not been able to respond to more than an insignificant fraction of the demand. It is a kind of knowledge that all the people want and it is pre-eminently proper that the government should furnish it.

We therefore earnestly demand on behalf of the people that congress at its next session appropriate not less than \$150,000 for this office, in order that it may be able at once to increase its facilities for this vitally important educational work.

Resolved, That we recommend that the office of public road inquiries should be advanced to a bureau, to be known as the bureau of public roads, and that an increase in the appropriation of money applicable should be made commensurate with the demand of this office.

Resolved, That it is the sense of this convention that all convicts and vagrants shall be em-



ployed in work upon the public roads and highways, and not in competition with honest labor, as at present.

Resolved, That the delegates appointed to this convention be appointed by this convention as a committee to organize in the different states and territories not already organized county and state organizations as the primary organization to this body.

Resolved, That the thanks of this convention are due, and are hereby tendered to the press for their practically unanimous aid in behalf of the work of the "good roads" of our country. Without their great interest in our work our efforts would not have borne the present fruit.

#### HARRY GEER KILLED

Harry R. Geer, of St. Louis, died last Sunday as the result of an accident 4 days previously in which Mr. Geer while riding a motor bicycle collided with a wagon.

Mr. Geer was but 27 years old and was one of the pioneer motor cyclists of this country, having graduated from the ranks of the chief exponents of cycling. Recently he had built up a motor cycle jobbing and manufacturing business in St. Louis and had become known as the "motor cycle man." He was well liked throughout the trade and being a hustler and an enthusiast, his business gave prospect of a rapid growth.

The funeral was held Sunday at his home, 8408 Hall's Ferry road. Mr. Geer leaves a wife and one child.

#### FIELD FOR BUSES IN THE SOUTH

"Motoring, while practically in its infancy the world over, is in its swaddling clothes down in Dixie," remarked Frank T. Reynolds, editor of the North Georgia Citizen of Dalton, Ga., to a MOTOR AGE representative. "Besides the acknowledged advantages possessed by better highways in the more densely populated sections of our great country, you have suburban competition in electric railways. Of course all cities and towns of any pretention down our way have these latter and some of the former, but most of the cities and towns with us have physically natural conditions that will average better than with you.

"Now the point I wish to make plain is that there are many, very many, communities down there in which lots of money can be made on small capital by some one familiar with the automobile to run omnibus and transfer lines. I have in mind two places, one of 15,000 and one of 6,000 population, in which a young man with say a 10 horsepower automobile, seating four people, can do a land office business 11½ months in the year. He can do it hauling passengers from and to certain places in no case exceeding 2 miles.

"A friend of mine in a Georgia city of 40,000 bought a steamer to carry four for his own pleasure. The city being an almost perfectly level one he devised a trailer of automobile wheels and axles which he hooked on his automobile and he accommodates ten passengers and travels faster than the average horse. This can be done in a great many places in the south. So you see what an opening there is for many young men of small means. If you know of any who desire to look into the matter I will take pleasure in putting them in communication with reliable, responsible people. We have so many towns of 5,000 to 10,000 population down there that are without adequate intercommunication and which cannot afford electric railways and which would not pay, that offer splendid opportunity for automobile service."

## SECOND ONLY TO PARIS

### St. Etienne, in France, a City With Thousands Working On Automobile Manufacture

St. Etienne, France, May 3—It is strange that when one asks a foreigner something about automobile centers in France he will invariably mention Paris, Lyons, Bordeaux, Marseilles, Lille, Rouen and a few other large places. Paris is of course the center, not only of France but of Europe, but if it comes down to the manufacturing part of the industry St. Etienne is, next to Paris, the most important town, and there are even many people who claim it is ahead of the metropolis.

St. Etienne is to us what Coventry is to England and Detroit and Cleveland to America. There are more factories located here engaged in the manufacture of automobiles or parts than almost all the other automobile concerns of our country put together, and when the large number of other manufacturing factories is taken into account, this city has no rival in France.

Being only an hour's railway ride from Lyon, and not far away from Grenoble and Dauphine, it has multiple connections with these important cities, located in one of the most populous parts of France. When taking the railroad trip from Lyon, the traveler would be amazed at the number of factories located all along the road. Steel and iron works are followed by silk mills, bicycle factories, automobile plants, coal mines, lace factories and glass works. There is hardly a quarter of a mile all along the road that does not have some kind of factory.

The most important of the factories in this locality, and very likely one of the greatest in the world, is the Manufacture Francaise d'Armes et Cycles de St. Etienne. It occupies an immense piece of ground, has thousands of employes, and machinery of the very latest design. As the name indicates, firearms and bicycles are its products. The other big concerns here are the following:

Societe Anonyme de Constructions Mecaniques de la Loire, manufacturing automobiles and fittings.

Les Forges & Acieries de la Marine et d'Homecourt, located at St. Chaond a suburb of St. Etienne, making steel frames and sheets for motor cars.

Societe Anonyme des Establishments Jussy, manufacturing motors and automobile fittings.

Societe Manufacturiere d'Armes, Cycles et Automobiles, manufacturing automobiles, bicycles and weapons.

There are many others, but these are the most important. It cannot be ascertained how many people are employed in all the factories and plants, but officials of the city say there are over 50,000. About 100,000 bicycles and 15,000 cars are built here during the year, and when the side lines are added the amount of business transacted during the season amount to over \$20,000,000.

#### CADILLAC CO. HUSTLING

Detroit, Mich., May 23—From out of ashes the Cadillac Automobile Co. has risen almost Phoenix-like. Work on the buildings has been going on with remarkable activity and the company is now turning out machines almost as fast as before the fire, but a little more than 5 weeks ago. Before the plant was destroyed

the company was turning out twenty-five completed machines each day. President Black said yesterday that they are now turning out twenty machines a day in the part of the plant which has been rebuilt and in the various factories which were temporarily leased. "Our greatest difficulty has been to duplicate the small parts which we made ourselves," said one of the directors. "We have satisfactorily solved the problem, however. We are now almost up with our orders. Inside of 10 days we will be turning out thirty machines a day—more than we have ever turned out before. At that rate we will be up with our orders in a very short time."

#### SCORE IN PROVIDENCE

Providence, R. I., May 21—One of the surprises of the trade here has been the rapidity with which new automobiles have been establishing agencies, and in one of the garages the other day two interested men made up a list of the machines that now represented in Providence. They found that there are twenty-one different makes which have agencies, and almost all are doing some business. Nine machines have come this year. All of the following cars had agents before this year: Pope-Toledo, Cadillac, Knox, Locomobile, Autocar, Winton, Peerless, Oldsmobile, Columbia, White, Stanley, and Waverley. The following have come here this year: Pope-Hartford, Stevens-Duryea, Ford, Rambler, Cameron, Reliance, Northern, Georges Richard-Brazier.

#### INSURANCE IN CLEVELAND

Cleveland, O., May 23—The automobile liability policy is one of the latest forms of insurance brought out by the leading accident insurance companies. Frank Wilson, a well known automobilist who represents the Aetna Life Insurance Co.'s accident department, is giving the new form of insurance considerable attention and he believes there is quite a field for such insurance. In cities like Cleveland where there are a great number of automobiles, accidents frequently occur and in case of injuries the owners of automobiles are frequently liable for damage suits. It is to protect against such damage suits that the new insurance is intended. The premium varies according to the type and power of car. Based on 12-horsepower cars the figures are \$40 for an electric, \$60 for a gasoline and \$100 for a steam car. Where a party or firm owns and insures more than one car, the additional cars are insured for half the amounts mentioned. The company employs inspectors and in cases of accidents the circumstances are investigated and if they indicate liability to the party insured, steps are taken with a view to a settlement of the claims.

Should legal proceedings be taken the company takes charge of the defense of the case and defrays the law costs and pays any damages that may be awarded.

The value of the insurance was demonstrated in a recent case where a local operator ran into and injured an Italian laborer. Some lawyer took up the case and brought suit, which might have proved expensive to the owner had not the insurance company taken charge of the case. In some manner the insurance inspector learned that the Italian had a hankering to see sunny Italy again, so the company bought the man a suit of clothes and a ticket to Italy and obtained a release from all damages, thus saving the owner a bill.

## AFFAIRS OF THE CLUBS



Something like half of the members of the Chicago Motorecycle Club are shown in the illustration at the hour of starting upon the club's run to Fort Sheridan and back last Sunday. The start was made at 9 o'clock, Captain Koeppel and President Ayers heading the line, with Mr. Wagner, of St. Paul, Minn., and Mr.

Hunter, of Hammond, Ind., as guests of honor. The official rendezvous at Evanston was visited and inspected on the way out. Hubbard's hill was easily negotiated by all machines and Highland Park was reached in time for dinner at the hostelry of Mayor Evans, who, by the way, has been persuaded to join the club.

**Club in Muskegon**—Motorists of Muskegon Mich., are planning to form an automobile club.

**Daytonians Out**—The Dayton Automobile Club, Dayton, O., gave its first club run for the season of 1904 last week. Fourteen cars carrying thirty-six persons took part in the affair.

**Forty Clubs in Germany**—There are forty automobile clubs and organizations in Germany, among them the Vereinigung Sächsischer Automobilbesitzer, of Dresden, and the Officier-Selbstfahrer-Verein der Verkehrstruppen, of Berlin.

**Named Committees**—President W. S. Kilmer of the Binghamton Automobile Club, Binghamton, N. Y., has named the following members to compose the new legislative committee of the club: C. E. Titchener, chairman; D. A. Smith, Harry Barrett, R. W. Whipple and W. H. Lockwood.

**Fifty New Ones**—Twenty-five regular members and twenty-five special members from the Evanston Boat Club, were admitted into the Chicago Automobile Club at its meeting last Tuesday evening. The Evanston club house will be formally opened next Saturday, and the occasion will be used for a club run to the Chicago suburb.

**Camille Has Title Role**—Sixteen automobile owners of Terre Haute, Ind., met last week and organized the Terre Haute Automobile Club. Camille Urban was elected president; Dr. Joseph Weinstein, vice-president; John S. Cox, secretary, and Fred Heintz, treasurer. The first club run will take place next week, the destination being Rockville.

**Wants a Speedway**—The election of officers of the Detroit Automobile Club, Detroit, Mich., took place last week. President Fred O. Paige was re-elected unanimously. The other officers named are: Russel A. Alger, Jr., first vice-president; C. A. Ducharme, second vice-president; De Witt Loomis, secretary; L. H. Case, treasurer. Three new directors were elected—Willis E. Buhl, C. A. Ducharme and L. H. Case, who succeed Fred L. Smith, William E. Metzger and George Kenney. Secretary Loomis reported that the membership list had almost reached the hundred mark and that the conditions of organization were satisfactory. E. S. George, chairman of the good roads committee, reported that the members were hard at work preparing the map showing

the roads in southern Michigan. When completed a handbook will be issued, which will contain much valuable information for tourists. Description of roads in every county will be found therein. Within a short time a map showing the roads to Elkhart, Ind., will be completed, and with the already known road from the Indiana town to Chicago, Detroit motorists will find full details and information for a tour to Chicago. The president referred to the recent unpleasant happening in Birmingham, Mich., and stated that members should take notice that the speed ordinance in that locality is 6 miles an hour and should be strictly observed. Harry B. Joy, of the Packard Motor Car Co., wrote a letter which was read at the meeting. It pointed out that there was no place in Detroit at present where owners could speed their machines and the suggestion was made that the matter be placed in the hands of the legislative committee to arrange that a part of the boulevard might be used for the purpose.

**A Policeman's Joke**—The second annual automobile parade arranged by the Louisville Automobile Club, Louisville, Ky., was held Saturday. Seventy-eight cars of various styles took part in the run, which attracted thousands of spectators along the line. An automobile bus seating sixteen persons was used by the band and in another large passenger car a dozen bluecoats, each with a "guess-the-speed" automobile watch in hand, were trying to find out "accurately" how fast the parade was moving. One was overheard to remark to another: "Gee whiz, Bill, isn't that swell! We're going so fast I could count the feathers on that woman's head."

**Referred to the Law**—The Automobile Club of Philadelphia, Pa., has taken up the case of one of its members, Samuel Bell, Jr., who was recently fined for driving his car at more than 10 miles an hour in the township of Radnor, and who appealed, basing his act upon a law passed by the legislature in 1903 which fixed the speed limit at 8 miles an hour in cities and boroughs and 20 miles an hour outside city and borough limits.

**Going to the Races**—The Rhode Island Automobile Club, of Providence, R. I., will hold a run to Readville Decoration day, and this will be the second run of the year. The members are going to see the races that have been arranged by the Massachusetts Automobile Club, and if the weather is fair it is expected

that over forty machines will be in line. The party will go to Sharon, Mass., where lunch will be served, and after that the journey to Readville will be resumed.

**Passed Half-Century**—The Louisville Automobile Club, Louisville, Ky., which was organized in April, 1903, recently passed the fifty membership mark.

**Want Speed Limit Raised**—Residents of Oak Park, a suburb of Chicago, are in favor of having the present speed limit of 8 miles an hour increased to 12 miles. At the next meeting of the village board the matter will be discussed.

**Club at Geneva, N. Y.**—At a meeting of motorists of Geneva, N. Y., and at which S. C. Tallman, of the New York State Automobile Association was a guest, the Geneva Automobile Club was formed and the following officers were elected: H. L. Rose, president; M. F. Blaine, vice-president; Charles Fairfax, secretary and treasurer. Application for membership in the state association will be made.

**Farmers Interested**—The Granite State Automobile Club, of Manchester, N. H., had its first run of this season last Sunday. Eleven vehicles carrying about thirty passengers took part in the run which was to Concord and return. The condition of the roads was good and there were no accidents. The country people came in large numbers to different points along the road to watch the procession.

**Against Scorching**—Members of the Milwaukee Automobile Club have placed the mark of their disapproval upon scorching. At the last meeting of the club held at the Hotel Pfister resolutions were adopted condemning the practice. A committee consisting of Dr. Louis Fuldner, James T. Drought and U. W. Iverson has been appointed by the club to make arrangements for the auto show which it is proposed to hold in August. A large number of new members have recently been added to the Milwaukee organization.

**St. Louisians to Organize**—A long time ago there was considerable interest among St. Louis motorists in an organization, but that seemed to have died out somewhat in the excitement over the fair. The subject of a new organization is now being considered, the need of an organization in the city of the world's fair having of late been more apparent than ever. The motorists of that city



have been subjected to abuses that would not be permitted if a live organization existed. There is much work that can be done in matters of legislation, road improvement, tours, etc., that would keep a club and its officials pretty busy for several years to come.

**Elected New Officers**—The Automobile Club of Pittsburg has elected these officers for the next year: President, W. C. Temple; first vice-president, James Francis Burke; second vice-president, W. H. Nimick; third vice-president, Edward Kneeland; treasurer, Reuben Miller, Jr.; secretary, W. Linford Smith. W. L. Elkins, W. J. Lewis and Dr. John A. Hawkins were elected a board of governors to serve until May, 1907. From now on during the season the club will hold regular fortnightly meetings.

**Race for Members**—At a meeting of the board of governors of the Automobile Club of Philadelphia, held Thursday, George T. Lip-

pincott, of Atlantic City, offered a cup to be competed for by members of the club in a handicap run to Atlantic City, the winner of the run to become the possessor of the cup.

The offer was accepted and the committee on tours and runs appointed to take charge of the contest. The contest is open for members of the club only, and is open to all classes of vehicles. A car must be in full touring trim and carry the maximum number of passengers the car is designed to carry. The event will be held Saturday, June 11, and the winner is to be the member making the trip from the Pennsylvania ferry, Camden, N. J., to Atlantic City in the shortest time.

**Club Favors Low Speed**—The Automobile Club of Pittsburg, Pa., went on record at its last meeting as favoring the rigid enforcement of the speed ordinances. Director of Public Safety Moore asked that action be taken and the matter was referred to a com-

mittee and later the following resolution was adopted: "That the Automobile Club of Pittsburg puts itself on record that each and every member of the organization will not only comply with the regulations concerning the speeding of automobiles, but will use his influence to enforce the laws of the commonwealth covering the same; the secretary is hereby instructed to mail to each member of the organization a copy of said law, and a vote of thanks is extended to the director of the department of public safety of the city of Pittsburg directing attention to the matters referred to." The speed limit within the city limits is fixed at 8 miles an hour. Without the city limits the limit is 10 miles an hour, providing that all reasonable precaution shall be taken on sharp curves, heavy grades, etc. No accidents have resulted thus far and the club is determined that for the good of automobiling the laws shall be enforced.

## FROM NEW YORK TO ST. LOUIS

The thousands of motorists who contemplate touring from New York to the St. Louis exposition this summer will be interested in reading an account of the conditions and trials encountered by three amateurs who left Gotham last week with St. Louis as their objective point. The tourists are Percy F. Megargel and William S. Harrison, of Rochester, N. Y., and Ralph G. Megargel, of Scranton, Pa., the two former newspaper men and the latter an old-time advocate of the steam class of vehicles who is making his first experimental trip with gasoline as the motive power, an Elmore being selected for the journey. The three occupants attired from head to foot in leather, each supplied with a 38-calibre hammerless, looked prepared to journey to the end of the earth.

The start was made from Forty-second street, New York, leaving the garage of the Richmond Automobile Co. shortly after noon and taking the ferry to Weehawken. The hill at that place proved steep, but was well paved and we went up the greater part of it on the high gear, the signs on either side "New York to St. Louis" attracting attention.

At Fair View we encountered a toll gate, with a notice reading: "Automobiles 10 cents." Upon stopping to pay, the man inside the ticket window informed us that no toll was charged motorists and to run right through all toll gates en route, as automobiles were considered a benefit to the road. This might have been true, but later we were informed that the charter read "toll to be charged all drawn vehicles."

After passing through Arcola, some 16 miles from New York, following the white arrows erected for the endurance run, we ran up against our first snag. It was a high board fence erected entirely across the highway without notice telling why. An investigation revealed the fact that the bridge to Ridgewood was down and a long detour was necessary in order to get across the stream.

The road through the New Jersey towns, and in fact from New York to Newburg, were in perfect shape and we bowled along at some places at remarkable speed. Horses met on the road within 50 miles of New York city paid not the slightest attention to the automobile and it was not until Newburg had been passed that domestic animals showed alarm.

While we were attired in leather from head



to foot, we carried extra suits of clothing in one of our hampers, intending to don them when making our appearance in the hotel dining room. Our intentions were all right, but upon taking out the clothing at the conclusion of the first day's run, we found it such a mass of wrinkles and creases as to make it entirely useless until pressed, and after the first day we appeared three times a day attired in leather and probably attracted no more attention than any three young men would who drew up in front of the hotel in an automobile bearing two placards reading: "New York to St. Louis."

Just before we reached St. Remy, on the way to Kingston, it commenced to rain. We pulled on our rubber coats, stuck to the machine and our trouble commenced. We had neglected to bring a supply of rope to bind our wheels and we slipped from one side of the road to another in a vain attempt to keep out of the deep wagon ruts in the clay soil. After being fairly successful for a fraction of a mile we landed with a crash into the deepest ruts along the course. Expecting to find many things broken we hastily descended and standing in the mud several inches thick watched the wheels run around in the ruts without touching bottom while the two axles and the machinery rested on the ground between the wheels.

It was at this point we congratulated ourselves that we had a 1,200-pound machine in-

stead of one in the 2-ton class, for by uniting our strength we were able to lift the rear wheels out of the rut and place them on high ground, repeating the operation on the front wheels. A careful examination showed no further damage than a bent mud gear and a chain clogged with mud, and we proceeded on our journey westward, arriving in Kingston without a mishap.

Of all the roads encountered on the trip the streets of Kingston were the worst. It was bounce, bounce, bounce, until the inevitable happened and a spring snapped. Upon visiting a blacksmith to have the leaf welded we found four other light vehicles awaiting their turn to have springs repaired and were informed that this was an everyday occurrence and had been for years, owing to incompetent road commissioner.

In leaving Kingston we ascended the mountain to Stony Hollow, on what is known as the rock tramway. This is made of huge stones laid far enough apart to allow standard gage wagons to have continuous pavement underneath their wheels. Loads of stone weighing 8 to 10 tons are hauled over this tramway from Stony Hollow to the boat landing at Kingston. The wear on the stones is tremendous, and, hard as the roadway is, ruts 3 and 4 inches deep are soon worn into the stones, making a track that when once in, is difficult to get out of, especially with an automobile on a wet day.

When the state road was encountered a few miles further on, we felt at peace with the world and our machine glided along at any speed we wished. At Phonecia we met the Ulster county road commissioner and had an opportunity to thank him personally in the name of the automobilists generally for the excellent state roads he maintained in his county. The commissioner, George E. Jocelyn, was pleased with our words of praise and said it was his object to have the best roads in the United States and with that object in view the county had already raised \$689,774, which the state doubles. The Ulster county commission has long urged the adjoining county of Delaware to meet them at their county line with good roads, making a continuous highway of fine macadam roads through the two counties. Delaware county is backward in road building and thus far has only spent \$54,320 for state roads.

**EDITOR'S NOTE**—This is the first of a series of articles by W. S. Harrison.

## GOSSIP OF THE GARAGES



DOME BUILDING AT FAIR GROUNDS, SPRINGFIELD, ILL., WHICH WILL BE USED AS GARAGE BY PARTICIPANTS IN ST. LOUIS TOUR

**After Queens**—Horace B. Day went to Detroit last week to secure shipments of Queen cars to supply the New York demand.

**Coming Decoration Day**—The first of the Fiat side-entrance tonneaux is expected by Hollander & Tangeman, New York, May 30.

**Famine Broken**—The Oldsmobile famine in New York was broken last week by the receipt of twelve runabouts and four tonneau touring cars.

**Electrics in Newport**—The Pope agents in Providence, R. I., say they are selling a great many Waverleys in Newport, while in Pawtucket the Cadillac business is better than formerly.

**In New Building**—The Pittsburg Automobile Co., formerly the Keystone Automobile Co., is now fully settled in its new building in Center avenue, East End, Pittsburg, Pa. N. W. Vester is manager of the company.

**Track in Garage**—What is considered one of the finest garages in Canada was recently opened in Montreal. It belongs to the General Automobile Co., and has a floor space 244 by 80 feet, clear of posts, and with a tenth of a mile covered track.

**Haynes in Philadelphia**—Thomas Rose has secured from the Brooklyn Automobile Co. the Philadelphia agency for the Haynes-Apperson. He will open a spacious garage for its sale and care in North Broad street. Mr. Rose ordered twenty cars for a starter.

**Packard Takes Offices**—A. P. Shumaker has established a new agency for the Packard machines and has opened a fine suite of offices in the Park building, Pittsburg, Pa. He has already made a number of good sales and is doing considerable demonstrating.

**With Factory Facilities**—The Pope Mfg. Co. has established a garage in connection with its automobile salesroom and Crescent bicycle factory at Wells and Schiller streets, Chicago. On account of the factory facilities at hand a specialty will be made of difficult repair work.

**Elizabeth Has Cars to Rent**—The business of the Elizabeth Auto Co., of Elizabeth, N. J., has grown so that the concern has leased a large building at 14 Westfield avenue, which has a floor space of 8,000 square feet. It will be used for storage and repairing. The company also rents automobiles.

**Garage and Factory**—The Pennsylvania Electrical & Railway Supply Co. has the only large garage in the downtown district of

Pittsburg, Pa., and is putting out a number of machines of its own make. Recently the company built a Rex Buckboard for Louis B. Hays at a cost of \$550, which is proving a decided success.

**Dolsons in New York**—The New York agency for the automobiles being built by John L. Dolson & Sons, of Charlotte, Mich., has been secured by Walker & Dam, who expect the first of them June 10. The Dolson cars have opposed cylinders of 18-horsepower, with either side door or rear entrances, will seat five passengers and sell for \$1,450.

**Decauville Strike**—The Standard Automobile Co., of New York, is experiencing an annoying hitch in its regular receipt of Decauville cars through a strike in the French factory. Hitherto this season the company has been among the luckiest of all the importers in its ability to make prompt deliveries. The present hitch, however, is but temporary.

**Establishing Steam Agencies**—The Central Automobile Exchange of Providence, R. I., which was recently incorporated, has established agencies in New York, Hartford, Bridgeport, Taunton and Fall River, and will begin to sell Stanleys at once. All of these places are new agencies, none of the men acting for the exchange devoting their time to anything else or to any other machines. This action is in line with the policy that was adopted at the time the concern changed hands.

**Back for Repairs**—The Chimut-Bayard car, in which F. E. Moscovics was making a tour from New York to Chicago in the interests of Sidney B. Borman and Emil Grosman was returned to New York last week for repairs. Lawrence Livingston, returning to Buffalo from a trip to Tonawanda, ran it into a tree and broke the radiator. When repaired it will resume its tour from Buffalo. In the trip to the Electric City over abominably muddy roads its only mishap was a broken spring.

**Jonas Had a Fire**—Theodore Jonas, one of the prominent automobile dealers of Milwaukee, Wis., sustained a severe loss last week in a fire which destroyed fifteen machines. His loss he estimates at \$17,000, of which about \$14,000 was not covered by insurance. According to officers of the Jonas Automobile Co., no cause for the fire has been discovered. The machines destroyed were for the most part new, only two being second hand. There were four or five touring cars in the building that

was burned, the remainder of the machines being runabouts.

**Big Southern Garage**—Savannah, Ga., claims to possess one of the finest automobile stores and garages in the south. It was completed recently at 18 State street and is occupied by R. V. Connerate. The building is three stories high, 33 feet wide and 90 feet deep. It is of brick, with a white front, which is a good imitation of white marble. The first story has a granolithic floor and is used as salesroom; the second floor is the storage room and the top floor the repair shop and stock department. An elevator 8 by 15 feet is used for hoisting the cars. Mr. Connerate is agent for the Pierce, Franklin, Pope, Autocar and Stevens-Duryea.

**Motor Car Clearing House**—Thomas W. Day, formerly president of the Day Automobile Co., of St. Louis and Kansas City, Mo., has completed arrangements for inaugurating a system of handling second-hand and new automobiles, under the name of National Automobile Exchange, with headquarters at St. Louis. The object will be to provide a medium of exchange, purchase and sale of second-hand automobiles, by listing them with the exchange upon payment of a small fee, which will be deducted from the commission when the sale is made. The exchange will list and advertise all machines placed with it for sale. There will also be a department for the purchase of new machines and supplies for customers at the lowest possible prices.

**Big Foreign Truck Arrives**—The Consolidated Motor Co., of New York, whose truck won the gold medal in the 2,000 to 3,000 pound class in the A. C. A. business wagon test, has received from Nuremburg, Germany, a friction-drive gasoline cab for demonstration purposes. Counterparts of it will be built at the Gloversville, N. Y., factory for private use and to equip a line the company expects to establish in New York. It is planned to complete 100 of the cabs before December next. Negotiations are in progress to equip one of the big express companies with fifty trucks and an order has been taken for six buses for a passenger line in Pittsburg. President Cryder says that the total cost of repairs in the medal winning truck during the year of its running was but \$109.16.

**White's Detroit Garage**—The White company is to have a fine garage in Detroit, Mich. Work has already begun and when completed it will be among the most convenient in the country, both as to location and interior arrangement. The new building is to be located at 72 and 74 Farrar street and will be a three-story brick structure, with paving brick front. The building will have a frontage of 45 feet, with a depth of 100 feet and a floor space, on the three floors and the large basement of 18,000 square feet. The ground floor will be used for display room and storage purposes. The second floor will be the salesroom proper, and a big repair department will be located on the third floor. In the basement will be the washing and cleaning department. The building will, of course, be equipped with spacious elevators for passengers and freight, electric lights, with the Luxfer system of day lighting. The building will be of slow burning construction and will be ready for the White company the first part of June.



## THE READERS' CLEARING HOUSE

### SELECTING A STORAGE BATTERY

El Reno, Okla.—Editor MOTOR AGE—What are the principal differences between the storage batteries regularly on the market and how should a person be guided in selecting a battery for use in an electric carriage?—R. S. Trulock.

The basic storage battery patents having recently expired, there is noticeable a similarity in the cells now on the market, which differ principally in the detail construction. Write for literature to battery advertisers and note particularly the internal construction, considering the vibration and jar to which the battery will be subjected in an automobile. See if the design of the grid is such that it will effectually retain the active material, and if the active material does shake off, determine if it will short circuit the adjoining plates. Also note whether wood, rubber or glass separators are used and their location, and see if the plates are amply supported? Find out which cell has the greatest capacity for its weight, considering also the maximum discharge rate without injury to the cell. Have the manufacturers give the average life of the cell and the annual cost of maintenance. A comparison of these factors from the manufacturers will help to arrive at a decision.

### TWO-CYCLE DESIGN

Columbus, O.—Editor MOTOR AGE—What is the correct area of the inlet piping of a two-cylinder, two-cycle motor of 4-inch bore and stroke to run at 1,000 revolutions per minute, and with the crank case space as small as possible? What should be the air opening area around the nozzle of a float feed carburetor for this engine, and what should be the area of the air inlet of the same carburetor? Should this latter area be maintained up to the point of constriction in area around the nozzle? What should be the size of the gasoline feed hole through the nozzle? Could this engine be controlled by an extra air inlet governed by a spring check valve between the carburetor and the crank case? Would not throttling effected without this extra air inlet reduce the compression pressure in the crank case to too great an extent? How far from the crank case should the carburetor be placed and what would be the effect of exceeding this distance? The carburetor would receive hot air from around the exhaust pipe?—C. C. H.

Use an inlet pipe  $1\frac{1}{4}$  inches in diameter and an exhaust of  $1\frac{1}{4}$  inches so as not to retard the exit of the burned gases. The air opening in the carburetor, unless supplied for the motor, should be adjustable. By experiment only can the proper relation of these areas be determined. If the carburetor has two air passages, one around the nozzle, and one auxiliary opening, it will be found that the nozzle air area should be about one-third of the inlet pipe. Arrange, if possible, between the carburetor and the motor an auxiliary opening closed by a light spring and having a maximum area of two-thirds that in the inlet pipe. A little experiment on the strength of spring and

the nozzle area will give a satisfactory carburetor. Do not attempt to throttle between the carburetor and the crank case, base explosions will be caused. The throttle should be between the crank case and the cylinder. Place the carburetor as close as possible to the crank case for the further away the less will be the suction and the base compression. Warm air to the carburetor will help to volatilize the oil, but hot air will result in "cracking" the fuel and will cause incomplete combustion.

### NEEDED RADIATING SURFACE

St. Louis, Mo.—Editor MOTOR AGE—What, in average practice, is considered to be the correct number of square feet of radiation surface per motor horsepower?—G. D.

Design the cooler so that the total radiating surface divided by the total cylinder heating surface equals 40 or over, the inch being the unit used.

### MULTIPLE-CYLINDER IGNITION

Numerous inquiries have been received by MOTOR AGE for explanation of systems of ignition of multiple-cylinder motors from a single induction coil. The illustration shows a good plan adapted to three cylinders but it may be used for any number by inserting more or less segments in the commutator and more or less secondary terminals. It consists of a case A-B of insulating material, which is free on the cam shaft and may be shifted to vary the spark lead. On the cam shaft J is keyed a commutator, composed of a metallic member I and an insulating member H. The metallic member has three slots, angularly equidistant, into which fit tongues from the insulating member H. At E is a brush resting on the commutator. Being fixed in A it is insulated except when in contact with the metallic segments of the commutator I. By following the wiring circuit it is seen that the coil will produce three secondary sparks to each revolu-

tion of the cam shaft, each of which must be distributed to a different plug. One of the secondary wires from the coil is connected to the insulating cap C, on the terminal G. The distributing arm F is insulated, being on the rubber portion H, and revolves with the cam shaft. As it rotates it passes successively the three terminals D D D, one of which is connected to each plug. At each primary interruption the secondary passes to G, jumps to F, and from F to the adjacent plug terminal. The arm F should be carefully set so that it is opposite a plug terminal at the same time the primary is interrupted, otherwise the coil will be injured.

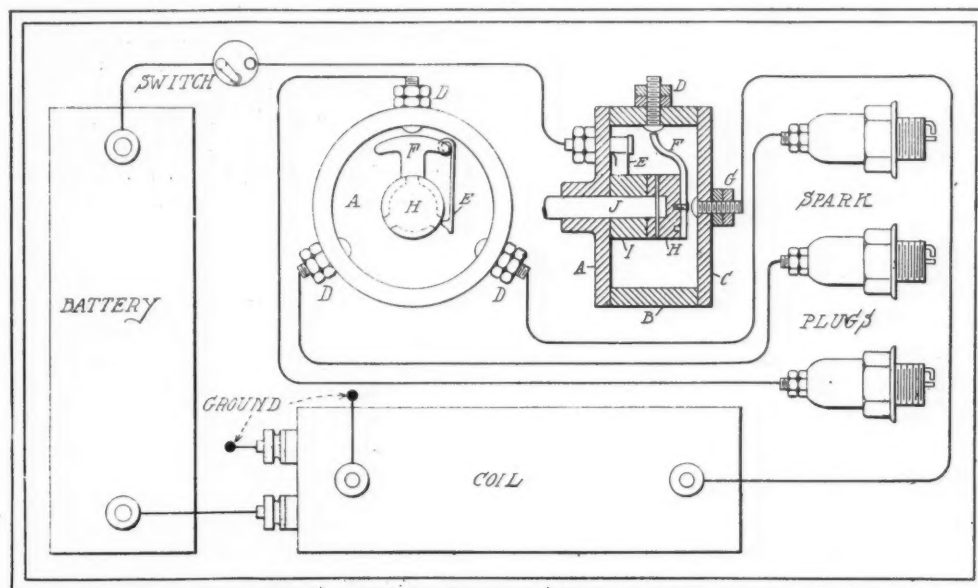
### GEAR VERSUS CHAIN DRIVE

Pittsburg, Pa.—Editor MOTOR AGE—Which is the better for a light tonneau car, chain or gear drive? Also what are the general advantages and disadvantages of each system?—R. E. Twyford.

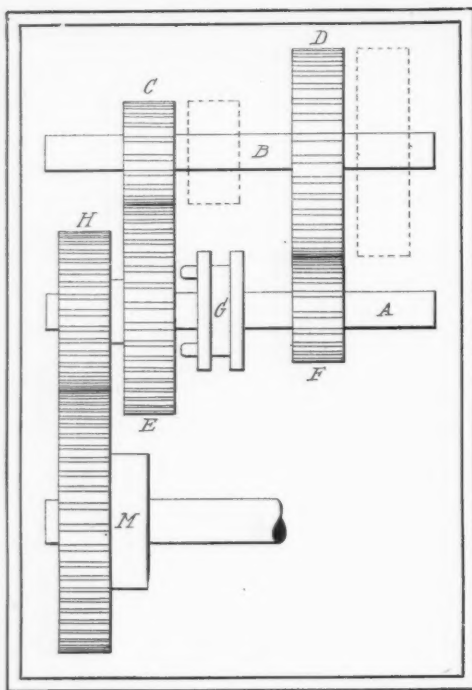
The system of driving through a chain furnishes an extremely simple construction which possesses the advantage of being readily repaired and permits of several gear changes. The chain is exposed to mud which without some form of a protector produces cutting of the sprockets and links. Considering efficiency under favorable conditions there is no choice between bevel gear and chain drives. The bevel gear drive is more expensive but is entirely enclosed from dirt and runs in oil, when properly designed. Usually when a chain is lubricated it becomes a collector of dirt and the efficiency of the drive decreases. For a light tonneau car the chain drive seems to have a decided preference, although the bevel gear system is rapidly becoming more prominent on the better grade of cars.

### AMOUNT OF COOLING WATER

Altoona, Pa.—Editor MOTOR AGE—I was interested in the article in MOTOR AGE recently on motor cooling systems. I do not claim to be a judge of the different forms of coolers but believe that there are 13 or 14 gallons more water than is needed in a 15-gallon system of any kind. Am I correct when I say that the volume of water in the tank does not necessarily increase the cooling efficiency? Is the tank not merely a reservoir? Has it anything to do with the reduction of the water temperature? The water is heated by the engine and cooled by radiation while passing through the radiators. What is the difference,



COMMUTATOR AND WIRING SYSTEM FOR IGNITING MULTIPLE-CYLINDER MOTOR FROM ONE COIL



GEAR SUGGESTED BY E. P. DU PONT

if any, in the horsepower of a 5 by 5-inch single-cylinder engine and one  $4\frac{1}{4}$  by 6 inches, both running at the same speed?—J. U. Blouse, M. D.

The volume of water does not increase the cooling effect except as it serves as a carrier, and being of large volume must be contained in a vessel of large size, which of course means more radiating surface. The volume of water depends upon the efficiency of the radiator. A certain number of heat units may be abstracted from a certain volume in the unit of time or these heat units may have to be distributed in twice the quantity of water, to be carried away in the same time. The 5 by 5-inch motor has 1.15 times as much power as the one of  $1\frac{1}{4}$  by 6-inch bore and stroke.

#### VALVE PROPORTIONS

Cleveland, O.—Editor MOTOR AGE—What horsepower would a four-cylinder motor of  $3\frac{1}{2}$ -inch bore and 4-inch stroke develop at 900 revolutions per minute? How large should the inlet and exhaust valves be? What should be the lift of the valves and at what point of the piston stroke should the exhaust valve open? What should be the diameter and weight of the exhaust valve?—E. H. Sherbondy.

A four-cylinder motor  $3\frac{1}{2}$  by 4 inches should develop 10 horsepower at 900 revolutions. Make both valves  $1\frac{3}{8}$  inches in diameter and have them lift  $\frac{3}{8}$  inch. Have the exhaust valve stem  $\frac{1}{2}$  inch in diameter and it will prevent burning and pitting by conducting the heat more rapidly. Open the exhaust valve when the piston is within 11-32 inch of completing the stroke.

#### TWO-SPEED TRANSMISSION

Moulchaum, Del.—Editor MOTOR AGE—I have a gasoline automobile with a 4-horsepower motor whose maximum speed is 2,000 revolutions per minute. I wish to fit it with a slow speed transmission gear in the place of the single speed or direct drive with which it is now equipped. There is not much lateral space for the application of this gear. Would the system shown in the accompanying sketch be practicable and efficient, as well as easy to make? The crank shaft is A, while H is the driving gear to which is attached the free gear E. When the gears on the counter shaft B are in position for slow driving, the drive

is through F, D, B, C and H to the rear axle. When the counter shaft gears C and D are out of mesh, respectively, with E and F, the disk G, slidably but non-rotatively mounted on A, is moved toward the gear E so that the pins on its side engage with corresponding recesses in E and thus establish a direct, high-speed drive. There is a suitable clutch at M. The gears E and D would each have forty No. 8 pitch teeth, while the gears C and F would have twenty teeth, thus reducing the speed to one-fourth on the low gear drive. If this is not a good plan will you kindly show a better one which will not occupy any more lateral space?—E. P. du Pont.

The transmission shown will work very well, but the clutch, if placed between the motor and the transmission, instead of at M would render the car less noisy when the motor is running idle. The sketch shows two movements necessary to get from the low to the high gear, first throwing out the counter shaft, and second, throwing in the positive clutch G. If there is no objection to having the counter shaft running idle on the high gear, the gear F may run idle on the shaft A and have corresponding clutch faces to engage with the shifting collar G. This would simplify the general arrangement, particularly the operating levers, and would take very little more room. The construction would then be quite practicable.

#### VALVE LIFT

Michigan City, Ind.—Editor MOTOR AGE—I have under construction a four-cylinder gasoline motor of  $3\frac{3}{4}$ -inch bore and 4-inch stroke. The inlet and exhaust valves are of the same diameter, with a  $1\frac{1}{2}$ -inch opening in the valve seat. The seats are beveled to 45 degrees. All valves are mechanically operated by cams. The motor is to run at a maximum piston speed of 750 feet per minute. What is the least possible lift of the exhaust valves for this motor, and what should be the lift of the inlet valves to give the best results at the speed mentioned?—R. E. Crockett.

The valves are of good area and a lift of 5-16-inch will be sufficient, and if the motor speed is to be not higher than 750 feet per minute 9-32-inch lift will do. Give the inlet and exhaust valves the same lift so as to use interchangeable valves and cams and depend upon the throttle for speed variations.

#### FINISHING VALVE CHAMBERS

Columbus, O.—Editor MOTOR AGE—I would like to know the most accurate and most convenient method of boring and facing valve seats and of getting the valve stem holes in line with the seats; also of boring, facing and chasing, or cutting threads if the valve stem guide is screwed in. Referring to the accompanying drawing a center line through A ought to pass centrally through B; also the center of C ought to coincide with that of D. In some cases, B is only 5-16-inch in diameter, which is a very small hole to bore, while if one depends upon a drill it will run out of line and throw the hole to one side. The larger hole E can be bored out accurately relative to C, as it is usually  $\frac{3}{4}$ -inch in diameter, or more, and can be bored at the same operation with C. In many cases the facing cutter with its pilot I in B, and a collar G which slips over the shank H to fit into the hole F, may be used with fairly good results in the finishing operation of facing A. Information upon this subject would be appreciated.—C. E. F.

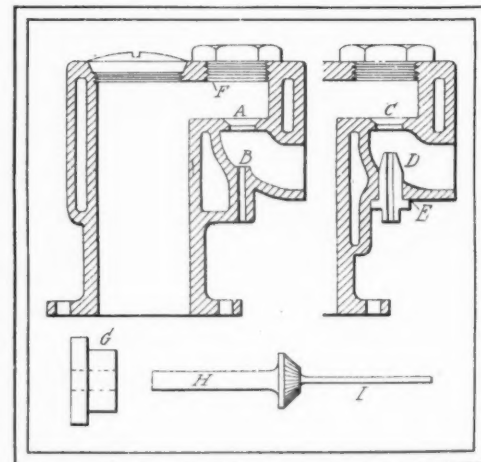
The method shown should give a pretty accurate job. On the cylinder with the plain valve stem guide, design this guide B as long as possible, so as to steady the cutter. Bore the holes F and A and make a plug for each, with a hole for the drill size at B. With the plugs in place drill the hole B, the plugs acting as guides. Afterwards ream B. Then insert the plug G and with the cutter on I make the valve seat. When a separate guide is used do not screw it in but make it a drive fit. As previously described bore the hole for D and F and rough bore the valve seat C. The guide D is turned on an arbor, the hole having been reamed. After it has been driven in place the cutter I is used having a guide for the pilot in D and one for the shank in plug G. Do not cut the threads for the screw plug G until these operations are completed. This will line the valve but of course grinding will be necessary as well.

#### DOGS AS NUISANCES

Hamilton, Ont.—Editor MOTOR AGE—A short time ago my chauffeur, while driving my car on a main street of the city, killed a dog. The owner is now about to enter suit for a large amount for the loss of the dog, which was considered valuable as a pet and on account of its pedigree. The owner of the dog claims that the car was being driven at a "furious rate" and that the driver did not stop to see what damage he had done. My man was going up hill at the time and says that he had one of his carbureters turned off, as the engine had not been working properly, it being the first trip out after having been dismantled for winter repairs. He also says that the dog jumped out from the side of the road, stopping in front of the car, which seems reasonable. The wheels did not run over him, but he passed right under the body of the car, being killed by the sprocket.

As you are no doubt aware, dogs are a continual source of danger and annoyance to automobilists. If to this is to be added the danger of heavy liabilities for every accident to these animals, automobiling will become too costly for the ordinary mortal to indulge in.

For the above reasons I intend to fight the suit on the ground that dogs when at large are at their owners' risk. There are very few cases on this point as regards automobiles, and I fear that the court may think it sufficient proof of negligence on the part of the defendant should the plaintiff establish the fact that the car was being run at a "furious rate," which would not be difficult, on account of the universal dislike in which the automobile is held by the lover of horses.



VALVE CHAMBER FINISHING



By the laws of the United States or England, is it sufficient proof of the fracture of a speed limit law to say that a car was being driven at a "furious rate" or must the actual rate be established by the plaintiff?—STEWART E. MALLOCH.

To prove that a man has broken a speed law the actual speed at which he was driving must be given. Of course, this means simply that the plaintiff must convince the judge that a certain rate of speed was attained. The ease and amount of proof with which this may be done depends upon the judge.

#### MOTOR CHATTERING

New Paris, Ind.—Editor MOTOR AGE—What can be done to stop the inlet valve of a motor from chattering? My motor is of the single-cylinder pattern and of 5¼-inch bore by 6-inch stroke. The inlet valve is suction, or, more correctly, atmospherically operated, and is 1½ inches in diameter. The valve chatters a great deal at times, especially when the motor is running light or without load. Why are automobile motors almost invariably made without means for taking up wear in the crank shaft bearings? The wear of a few weeks will cause the shaft of my motor to pound and to run out of line. Would a split adjustable bearing be advisable on the crank shaft of this motor? It runs at 900 revolutions per minute. Why are bronze bushings generally used in preference to babbitt metal? Would not babbitted bearings be less liable to cause damage to the shaft? How should I proceed to correct a wrist pin bearing which has become heated so that furrows have been cut in the shaft and connecting rod? Would air pressure from the crank case be suitable for forcing oil from the lubricator in cold weather? If such pressure were used should there be a check valve between the crank case and the lubricator?—ELMER WHITEHEAD.

Chattering of the inlet valve may be caused either by the spring being too stiff for the speed at which the motor is running, or by the valve being too large. Try a lighter spring tension. It is a fact that many motors have no take up in the crank shaft bushing, which is decidedly poor practice. If possible arrange to use a split bushing. For many reasons a babbitt bearing is to be preferred to a solid bronze bushing, but, of course, it has no adjustment. Remove the crank shaft and turn in a lathe until the furrows disappear; then make a new bushing bored to fit. A temporary repair can be made by filing the shaft and finishing with emery cloth, and smoothing the bushing with a scraper.

#### REDUCING VIBRATION

Greensburg, Ind.—Editor MOTOR AGE—My automobile has a 10-horsepower double-cylinder, vertical motor, with both pistons connected to the same counter-balanced crank pin, and with an impulse each revolution. The fly wheel is 18 inches in diameter. The engine develops its full rated power but there is too much vibration. Would it lessen the vibration to substitute two smaller fly wheels, one on each end of the motor crank shaft? If so, what should be the diameter and weight of each? The engine seems to be perfectly balanced when turning it over with the starting crank. What is the best method of wiring this engine, which has a single-nose cam on the cam shaft and a double contact commutator with two binding posts?—I. J. Hollensbe.

A fly wheel on each end will not affect the

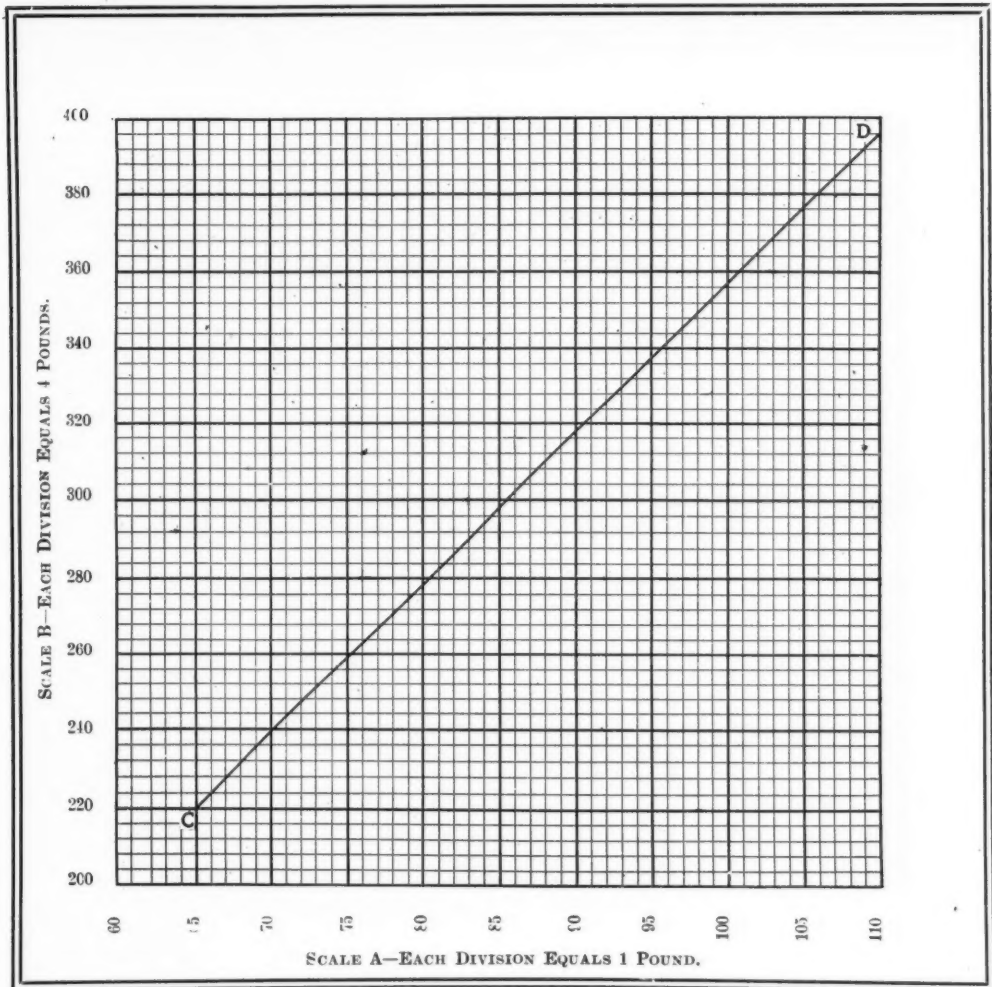


DIAGRAM OF MOTOR PRESSURES

vibration. A little experimenting by adding more or less counter balance may help. This could be done by drilling holes in the fly wheel in line with the crank throw and bolting blocks of various weights until a weight is found that gives the least vibration. The head of the piston should not be over 5-16 inch thick and the piston wall below the pin should not exceed ¼ inch. Extra weight in the reciprocating parts will produce excessive vibration. MOTOR AGE illustrated a wiring system in its issue of May 12 for using two coils, and one in the issue of May 5 for using one coil, on a two-cylinder car.

#### MOTOR DESIGN

Columbus, O.—Editor MOTOR AGE—I am designing a four-cylinder opposed motor of 3½-inch bore and stroke, and wish assistance on a few points. What power will it develop at 1,000 revolutions per minute? What should be the size and weight of the fly wheel? Would two cranks set at 90 degrees so that pins of each pair would be at 180 degrees, be the best method of attaching the connecting rods? What style of clutch will furnish the easiest starting? Does a metal-to-metal clutch running in oil give good results?—C. K. P.

Four cylinders 3½ by 3½ inches should develop nearly 9 horsepower at 1,000 revolutions per minute. A fly wheel 17 inches in diameter having a rim weight of 55 pounds will be ample. The best way to arrange the cranks would be to have the cranks for each opposed unit 180 degrees apart and have the line of throws of the respective pairs at right angles to each other. Probably the easiest starting clutch is of the coil spring variety such as is used on the Mercedes car. A clutch composed of several separate radially expanding arms will start very easily. A metal-to-metal clutch

running in oil with one surface of bronze and the other of steel will be found very smooth in action and quite durable.

#### EXPLOSIVE PRESSURE

In response to several recent inquiries the accompanying diagram is given to determine the appropriate explosive pressure in a motor when the gauge pressure is known. In it all pressures are absolute, 15 pounds, or atmospheric pressure being added to the gauge pressure. Scale A represents the absolute pressure of compression, and scale B the absolute pressure of ignition. Suppose the gauge pressure of compression is 73 pounds per square inch and it is desired to find the ignition pressure. The absolute pressure will be 75 pounds plus 15 pounds, or 90 pounds. On scale A, at the 90-pound line, follow vertically to the line CD. At the intersection of this line with CD, project to the left on scale B. The projection strikes the vertical scale between 316 pounds and 320 pounds and is about 318 pounds. This being an absolute pressure, subtract 15 pounds, which gives 303 pounds as the approximate gauge pressure of ignition in this case.

#### RACER DIMENSIONS

La Rue, O.—Editor MOTOR AGE—How many cylinders has the 90-horsepower Mercedes with which Vanderbilt made his record mile in 30 seconds and of what bore and stroke are they? Of what bore and stroke are the cylinders of the eight-cylinder Winton Bullet?—N. H. Davis.

MOTOR AGE understands that the Vanderbilt Mercedes cylinders are about 6 9-64 by 7 5/8 inches. Winton's eight-cylinder car contains motors similar to the Winton touring car motor, which has a bore of 5¼ inches and a stroke of 6 inches.

## FROM THE

## FOUR WINDS

**Not So Many**—On January 1 of this year 15,432 motor cars were registered in Great Britain.

**New Pennsylvania Concern**—The Twyford Motor Car Co. was recently organized in Brookville, Pa. R. E. Twyford, of Pittsburgh, Pa., is general manager.

**No Automobile Races**—The New York State Fair Commission at its meeting at Syracuse, N. Y., last week decided there should be no automobile races at the fair this year.

**Supreme Judge a Motorist**—Judge Hooker, of the Michigan supreme bench, is probably the first supreme jurist to become a motorist, having recently bought a Thomas Flyer.

**Two Busted**—Applications were recently made in the court of chancery, at Trenton, N. J., for the dissolution of the charters of the Hercules Motor Co. and of the New York Automobile Co. Both companies have been declared insolvent.

**Road Maps**—C. S. Mendenhall, 512 Race street, Cincinnati, O., is issuing road maps of central and eastern states, especially prepared for automobilists. Each state book contains a large map of the state and several detail maps of different sections.

**Kilometer Record Broken**—According to a cablegram report Baron de Caters, the Belgian automobilist, broke the world's kilometer record last week at Ostend, covering the distance in 23 seconds flat, which gives an average speed of 97 miles per hour.

**Speed Did It**—While George H. Baltz, of Watertown, N. Y., was riding one night last week in his automobile the gasoline tank in some way caught fire, starting a blaze that threatened the machine and its occupants. It was quickly extinguished before much damage was done.

**Factory at McKeesport**—Randolph E. Sweeny, of Philadelphia, Pa., and other eastern capitalists have purchased a site in McKeesport and will build a plant for the manufacture of automobiles and electric carriages. The plant will employ 200 men and will be started at once.

**Assessors After Motorists**—The city assessors of Trenton, N. J., have secured the names of 110 owners of automobiles in the city. The value of each machine will be furnished by the state licensing office and from the information the assessors will fix the tax to be paid by the owner.

**Century Stock Sold**—Before leaving Syracuse, N. Y., on a 10 days' trip to Quebec last week Frederick B. Scott, of the Syracuse Supply Co., announced that nearly all of the \$50,000 worth of machinery and stock purchased from the trustee in bankruptcy of the Century Motor Vehicle Co. had been resold, so that there is little remaining at the factory.

**An Effective Penalty**—The German Automobile Club has issued a special notice to its members to the effect that on account of the numerous complaints of fast riding which it has received from the local authorities of many localities along the Taunus route, it has decided to ask the government to prevent the use of the road to any motorists unless the driving of cars beyond the speed permitted by law ceases at once.



JOSEPH CAWTHORNE, OF "MOTHER GOOSE" COMPANY, AND HIS WIFE.

**A Dealer's Predicament**—Carl G. Fisher, a dealer in Indianapolis, Ind., was arrested a few days ago because the initials which the state law requires to be on every motor car were not on the machine which he had at the time. When taken to the police station the dealer protested against the arrest, claiming that the machine was new and about to be delivered to its purchaser. He further stated that he had received six new automobiles that morning and that he had to run them through the streets in order to get them to his store, and that he could not very well have secured the required license and initials. The police officer refused to dismiss the case, which will be argued before the police court judge. Fisher said that he would take the case into the higher courts if necessary, believing he was not at fault.

**Must Make Good**—A Belgian justice recently decided that if a dealer in selling a car to a customer promised in writing, that the machine is in perfect order and could be run at a certain average speed per hour, the customer has the privilege of returning the car even after having had it 24 hours should it not come up to the promise. All the costs in connection with the case had to be paid by the dealer, and they included fees to experts who tested the machinery that was the cause of the suit.

**Freight Reduced**—By a recent ruling the old 5,000-pound minimum weight at which automobiles will be accepted as freight has been reduced to 2,000 pounds in the case of small cars. Such cars must be shipped crated or boxed, with wheels and seats detached and must form a package not exceeding 110 inches in length by 30 inches in height. This ruling has nothing to do with the N. A. A. M. campaign for lower freight rates, which aims at a general reduction.

**Edison Relentless**—It is expected that the report of Acting Commissioner of Patents Moore on the charges made by Thomas A. Edison against the patent office examiners, an account of which appeared in the last issue of MOTOR AGE, will be sent to President Roosevelt within the next few days. It may also go to the attorney general. It will be remembered that President Roosevelt directed the investigation.

**Gives Up Horses**—The Dubuque Malting & Brewing Co., Dubuque, Ia., which uses a great many horses and wagons, is reported to have decided to replace this service with automobiles. One was put into service a few days ago and the time gained in deliveries and the increased load which the car carries was a surprise to the officers of the company.

**Delivery Soon**—Smith & Mabley, of New York, will begin delivery of Simplex motor boats within 3 weeks.

**Mechanical Pastor**—Reverend C. H. Hobart, pastor of the First Baptist Church, of Los Angeles, Cal., has completed a small runabout of his own design. It is claimed that the car is well made and finished.

**Seeing Milwaukee**—The management of the Schlitz hotel, Milwaukee, Wis., has made arrangements with the C. G. Norton Automobile Co. to operate a hotel brake seating twelve passengers. It will be run for sight-seeing parties.

**Another Four Flush**—It is reported that Henry Mahlke, of Wheeling, W. Va., is finishing a racing machine which is supposed to travel at a rate of only 400 miles an hour. He expects to win the Gordon Bennett race next year.

**New Factories Growing**—The new factory of the R. E. Dietz Co. at Syracuse, N. Y., is being rapidly pushed to completion. The New Process Rawhide Co.'s new factory on the salt lands in the same place is also beginning to assume form.

**Slower than Miles**—The "wise" authorities of Dubuque, Iowa, are endeavoring to get an ordinance through the city council limiting the speed of automobiles to 6 miles an hour. Someone has also suggested that it would be a good thing to nominate a "walking delegate" to superintend the enforcement of the law.

**Championship Won by The**—Marius The, of France, on an 18-horsepower Clement motor cycle, won the world's professional championship in Paris May 8. The event was run in heats and semi-finals, the final being over a distance of 10 kilometers—6½ miles—which he covered in 6:27 2-5. Maurice Fournier won the championship last year on the same machine.

**Put Up Speed Signs**—In order to prevent motorists from claiming that they are not familiar with the city speed limit ordinance the authorities of Tonawanda, N. Y., have ordered a number of large signs to be placed at the principal street crossings and in prominent places along important thoroughfares. The signs will simply bear the words "10 miles an hour."

**White Enamel Numbers**—Alderman Sherburn M. Becker, a prominent automobile enthusiast of Milwaukee, Wis., will introduce an ordinance at the next meeting of the common council amending the present automobile law. Provision will be made that all machines carry numbers in white enamel and that all owners, with the number of their machines, be registered with the chief of police. The regulation desired is similar to that in other cities.

**Thieves in Detroit**—Automobile thieves were busy in Detroit, Mich., last week, according to newspaper reports. Six cars were stolen in 6 days and the manner in which the thefts were made seems to indicate that they were the work of a well organized band. In two instances it appears that the cars were standing in front of the owners' residences between 8 and 10 o'clock in the evening. The thieves simply got into the machines and drove them off.



**Owner Not to Blame**—The supreme court of Belgium rendered a decision recently which has brought forth the protests of a great many automobile owners. The higher court reversed a decision of a lower court, which had decided that the owner of an automobile is not necessarily responsible if an accident is caused by his car if driven by somebody else. The supreme court decided that when the law was made requiring automobile owners to number their machines it was done especially with a view of punishing the owner of the numbered car when he was found at fault. The only way he could possibly escape punishment was to give the name of the author of the accident, and even then he might well be held.

**Better Than a Trolley**—A suburban automobile service will probably be inaugurated during July in Philadelphia, Pa. The Philadelphia and Merion Transportation Company will handle the service, which will start at Fifty-second street and Parkside avenue, and be run to West Philadelphia and possibly to Merionville and Narberth. Two cars are to be used at first, each seating about twenty persons, and the fare will be 5 cents one way. Each trip will take from 20 to 30 minutes.

**Good Excuse, but Fined**—Charged with operating his automobile at a rate of 28 miles an hour, A. L. Cline, the Rambler agent at Washington, D. C., was fined \$10. In his own defense Mr. Cline said that the machine he was operating was for sale, and that dealers were compelled to gear the machines high to make a showing of great speed in order to satisfy possible purchasers. This plea, however, failed to move the court, and the fine was assessed.

**Brennan Enlargement**—The new plant of the Brennan Mfg. Co., of Syracuse, N. Y., is now in full operation. A short time ago the company leased for 10 years the factory building formerly occupied by the Pfenix Machine Shop & Foundry, a three-story building with 18,000 square feet of floor space, and has since equipped it with modern machinery for making gasoline motors.

**Forty-two in a String**—Forty-two motor cycle riders from New Haven, Stamford, Bridgeport, Brooklyn and other localities, and all riding Indian machines, were the guests of George H. Hendee, at Springfield, Mass., a few days ago. The excursionists attracted much attention and created amazement among the country people along the route to the Hendee factory.

**Same Conditions Exist**—The Diamond Rubber Co. announces that as the American Motor Association is the successor of the American Motor League, the conditions governing its diamond challenge cup will apply as if the latter existed. The cup must be won three times by one manufacturer or his representative to become his permanent property.

**Here's a Race**—Judge Hayward, of Nebraska City, Neb., has issued a challenge to any motorist in Omaha for a race between himself in his steam launch and an automobilist in his motor car, from Omaha, Neb., to St. Louis, Mo. The race is to start about July 1 if anyone accepts the challenge.

**Evanston Progresses**—Evanston motorists have been happy since 11 o'clock Tuesday night. The city council of the Illinois town met that evening and passed an ordinance raising the speed limit for automobiles to 12 miles an hour, an increase of 4 miles.

**Good for Quincy**—Twenty-one owners of automobiles have registered their cars with the city clerk of Quincy, Ill.

**Same Old Claim**—Allentown, Pa., has ninety-four automobiles and in proportion to its population is the first automobile town in the state of Pennsylvania.

**Few Out of Business**—Sixteen second-hand automobiles were destroyed by fire last week in Milwaukee. They belonged to the Jonas Automobile Co., and were insured.

**Still Another**—It is reported that Fred Titus, the former bicycle rider, will join the Pope Manufacturing Co. at Hartford and drive one of the racing cars of the company.

**It Depends**—A country paper claims that people in large cities living near a garage state they prefer to live near a stable, as the odor from the latter is not so objectionable.

**Big Garage Burned**—A cablegram from Nice, France, reports the destruction through fire of the automobile club's garage. About sixty cars valued at \$200,000 were burned.

**Factory at Harvey, Ill.**—It is reported that a new factory will soon be in operation in Harvey, Ill., which will manufacture an automobile especially adapted for rural mail carriers.

**Pretty Good Pay**—Jacquelin, the bicycle rider, is reported to have received an offer from an automobile manufacturer guaranteeing him \$100 a week for a year's contract as a driver.

**Register or Suffer**—Only 201 automobiles of the 300 or more that are owned in Indianapolis, Ind., have been registered. The police department is to make trouble for those found in fault.

**Study French Timing**—Three members of the German Automobile Club were sent to France to study the French system of time-keeping during the Ardennes eliminating race. This system will also be used in the German race.

**Money Going West**—According to a local report Boston capitalists are organizing an automobile touring company in Colorado Springs, Colo. About \$200,000 is to be invested for the building of a large garage, an electric light and power plant and the purchase of cars.



ITALIAN POSTOFFICE AUTOMOBILE

**Indianapolis Speed Limits**—In that section of Indianapolis, Ind., bounded by North, East, West and South streets motor cars may not be driven at more than 8 miles an hour. In other parts of the city 12 miles an hour is allowed. All cars must be registered and the owner's initials must appear in a conspicuous place on the car. A bell or horn and lamps must be provided on every motor car and drivers must slow at turns and crossings. Violation of the law is punishable with a fine of from \$5 to \$50, and in case of a pedestrian being run over on account of excessive speed the driver may be fined from \$1 to \$1,000 and sent to jail for 6 months. In case of manslaughter the penalty is from 2 to 21 years.

**Fine or Imprisonment**—An automobile ordinance was presented to members of the city council of New Castle, Pa., last week. It provides that the speed of automobiles when going through the streets of the town must not be above 6 miles an hour and that all cars must be provided with a bell, lamp or horn. The violators of the ordinance will be punishable by a fine of from \$5 to \$25 and imprisonment in the county jail not to exceed 20 days.

**Up Against It**—The chief of police of York City, Pa., says he can do nothing against reckless drivers because there is no city ordinance governing the speed limit of cars. There is a state law, but it cannot be applied by the police officer. The rate of speed allowed is 8 miles an hour all around, but at crossings cars must not be driven at a greater speed than 6 minutes for one mile.

**Took Off Big Chunk**—A. H. Piepenburg, of Santa Barbara, Cal., recently drove in his White touring car from San Diego to San Francisco in 5½ days, breaking the former record by 2½ days. The distance between the two towns, according to railway maps, is about 615 miles, but Mr. Piepenburg actually covered 740 miles, according to his odometer.

**Some Need It**—The Battersea Polytechnic Institution of London, England, has decided to start a summer class for chauffeurs. Twenty-eight pupils will be received for the course, which will last 6 weeks, and include workshop instruction and lectures. The instruction course will cost about \$10 and if driving lessons are wanted there will be a similar extra charge.

**Tufting Machines**—Upholstering for automobiles is the chief subject in the catalogue of upholstering appliances made by the Novelty Tufting Machine Co., 263 Dearborn street, Chicago. This company's tufting machines are used by about thirty of the leading automobile manufacturers.

**Prince on a Rubbing Tour**—Saturday last Prince Pu Lun, in company with Wong Kai Kah, commissioner to the world's fair from China, headed by Mayor Holtzman, visited the factory of the G. & J. Tire Co. at Indianapolis, Ind. The prince is making a study of American factories.

**Not Difficult**—A parade is being arranged in Minneapolis, Minn., for next Saturday. It is expected that it will be a big "400" turnout. At any rate, the Minneapolis motorists expect to do better than Chicago last Saturday.

**Monument to Renault**—A monument in memory of Marcel Renault will be unveiled May 26 in Boulogne, France, his native town. French motorists contemplate turning out in great numbers on the occasion.

# CURRENT MOTORING MISCELLANY

## FARMAN TO RETIRE

Henry Farman may retire from automobile racing. Before the French eliminating race on the Ardennes circuit he expressed himself to Parisian friends as intending to do so after that race in case he should not be successful in trying to secure a position on the cup race team.

Farman began racing in 1901 for the Darraq company. During that year he won three road races over distances varying from 93 to 280 miles, driving a two-cylinder racing car in each of these events. He became associated with the Panhard-Levassor company in February of that year, and finished sixth in the Paris-Bordeaux race, being set back account of tire punctures and after having been in the lead. The same year he arrived fifth in Berlin in the Paris-Berlin road race. In 1902 he was second in the 1,000-kilometer alcohol "criterium," and arrived first in Vienna in the Paris-Vienna race. Last year he took part in the Paris-Madrid race and had an accident soon after the start. He finished third in the cup race in Ireland.

## SOME PECULIAR WRECKS

Providence, R. I., May 21—Now that there are in this city many who have received new automobiles and whose knowledge of the powers, capabilities and eccentricities of machines is something less than that possessed by Oldfield, Schmidt and other speed sharks, there are already some machines back in the garages with badly damaged fronts and with considerable paint gone from all over the finely polished tonneau bodies. During the last 2 weeks there have been no fewer than three accidents in this city, and while there have been no fatalities some of the escapes have been closer than those who went through them care to repeat.

In Wrentham, Mass., last week a big touring car ran into a tree, which withstood the shock, but the automobile was a wreck. The engine was pushed back under the front seats and the radiator looked like a spring bed after a fire. Nobody was hurt, but all of the occupants of the big car got out of the machine in a mixed condition.

A recent purchaser of a \$2,000 machine ran it into a telegraph pole while seeing what sort of speed he could get out of his big plaything, and he hit the pole such a blow that it had to be reset. The canopy top of his machine went by the board, smashing the glass front and twisting the stanchions.

## THE ORMOND-DAYTONA COURSE

Much has been said and written about the Ormond-Daytona automobile racing course. Indeed, so profusely and abundantly has it been described, and pictured, and made the subject of public attention far and wide in other ways, that it has become better and more widely known in the two seasons of racing upon it than many tracks that have been in use for years. The principal reasons for its rapid growth in popular favor are that it is a straight course, and that that track, consisting mainly of fine sand, which is always wet on

account of the overflowing tide and solidly compacted, is unsurpassed as a speedway.

But little has been said of the material itself of the racing course, and of the physiographic conditions to which the formation of this choice piece of coast is due, and which favor its preservation. The section used for the track is 20 miles long, from 150 to 400 feet wide, and is largely compact sand of quite uniform consistency several feet deep. Samples of the material obtained about 4 hours after high tide were carefully examined in the Rollins college chemical laboratory, and the following results were obtained:

Moisture .....	19.00%
Chlorides .....	.15%
Calcium carbonate .....	.70%
Organic matter, etc.....	1.05%
Silica .....	79.10%

The chlorides are due to adhering sea water from the tide overflowing the bed, and the calcium carbonate to ground shells. The shells are ground so finely, however, that the presence of this substance would scarcely be noticed or suspected, except in certain places without making a chemical examination of the bed material.

The sand is unusually fine grained. Comparing a sample of this with one from a central Florida orange grove the following results were obtained:

Amount—	Mesh.	Racing Course.	Orange Grove.
Too large to go through	20	0.0%	0.4%
Too large to go through	30	0.0%	3.9%
Too large to go through	40	0.2%	8.5%
Too large to go through	60	0.4%	26.0%
Too large to go through	80	3.5%	45.1%
Too large to go through	100	51.0%	70.8%
That would go through	100	49.0%	29.2%

It will be seen that about 50 per cent of the track sand will pass through a hundred mesh, or is made up of grains less than .006 of an inch in diameter, whereas only 29 per cent of the orange grove sand will pass through this mesh. There is very little coarse sand among it, all passing 20 to 30, and only small percentages retained by the 20, 60 and 80 meshes, whereas the orange grove sand is made up of several grades, and considerable percentages of each.

The question very naturally arises why the sand is so fine and so free from shell-fragments. The answer is that it must be due largely to the wearing action of the tide itself, and the undertow, and especially to frequent shore currents that sweep with great force up and down the coast. Shells which are abundant on the shore sometimes, but are soon carried off, are subject to a violent wearing action, the small ones being ground to powder and the large ones rubbed and rolled along, suffering great loss from the severe attrition. And the sand itself is subject to a similar and constant wearing action.

The shore currents are the resultants of wind-waves striking the tidal wave at an angle at the place where the latter changes from the wave proper to the breaker. Shore currents are a common feature of coast action, and often do much disintegrating and grinding work, rock-masses of considerable size, shells, etc., being tumbled along the shore by them with great force. The conformation of the Ormond-Daytona coast greatly favors the formation of these currents, and the long straight uniform sea-bed here greatly facilitates their geological work.

## NEW CATALOGUES

Charles E. Miller, 97 Reade street, New York, has issued a 160-page catalogue of all of the automobile parts and appurtenances sold by this concern. It is one of the most complete booklets of the kind.

Canopy tops, dos-a-dos seats, hampers and similar motor car fittings are shown in a new booklet issued by the Wheeler Mfg. Co., of Detroit, Mich.

Imported lamps and headlights form a large part of the catalogue of Emil Grossman, 298 Broadway, New York.

The catalogue of Lozier motor boats, issued by the Lozier Motor Co., of New York, is typographically and in illustrations one of the most excellent catalogues seen this season. The wash drawings of mechanical subjects are especially good.

## RECENT INCORPORATIONS

New York—American Garage and Maintenance Co., capital \$100,000; to manufacture motor vehicles. Incorporators and directors for the first year, J. T. Rainer, P. N. Lineberger and H. V. Kibbe.

Detroit, Mich.—Sommer Motor Co., capital \$40,000, of which \$5,000 is in cash and \$15,000 in property formerly owned by the Hammer-Sommer Auto Carriage Co. Stockholders, Herman A. Sommer, William J. Sommer, Arthur Schreiter and Alexander J. Reno.

Portland, Me.—F. O. Bailey Carriage Co., capital \$150,000, of which \$25,000 has been paid in. F. O. Bailey, president; C. W. Allen, treasurer. Directors: the president, treasurer and W. A. Gilman, H. G. Millilen, E. W. Cobb and George A. Wagg.

St. Paul, Minn.—Armae Motor Co., capital \$10,000; to manufacture and deal in motors, bicycles and accessories. Incorporators, Edwin J. Killa, Archibald J. McCollum and Herbert B. Wheeler.

Baltimore, Md.—The Mar-Del Mobile Co., capital stock \$1,000; to deal in automobiles. Incorporators, Robert J. W. Hamill, John H. Suter, Graham B. Hall, Frederick W. Maldeis and Alexander Hamill.

Pierre, S. D.—Automobile Engineering and Power Co., capital \$100,000; in Illinois, \$2,500.

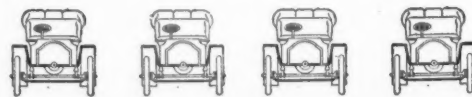
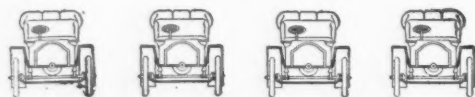
Detroit, Mich.—The Detroit Automobile Livery Co., capital stock \$10,000, paid in full in cash. Stockholders, Patrick O'Brien, William Nagel, William H. Mahs, Fred Mohn and E. R. Schreiter, Jr.

Canton, O.—Canton Automobile Supply Co., capital stock \$5,000.

Washington, D. C.—Seeing Washington and Mount Vernon Automobile Co., capital \$30,000. Directors, Frank C. Berens, S. Burkhart Emert and Emile P. Nussbaum.

## GETS PRIZES IN LONDON

Liberty & Co., of London, carried off first and second prizes with two vans built by the White Sewing Machine Co. in the parade of commercial vehicles promoted at the British capital April 30 by the Automobile Club of Great Britain and Ireland to demonstrate the extent of the use of automobiles for business purposes.

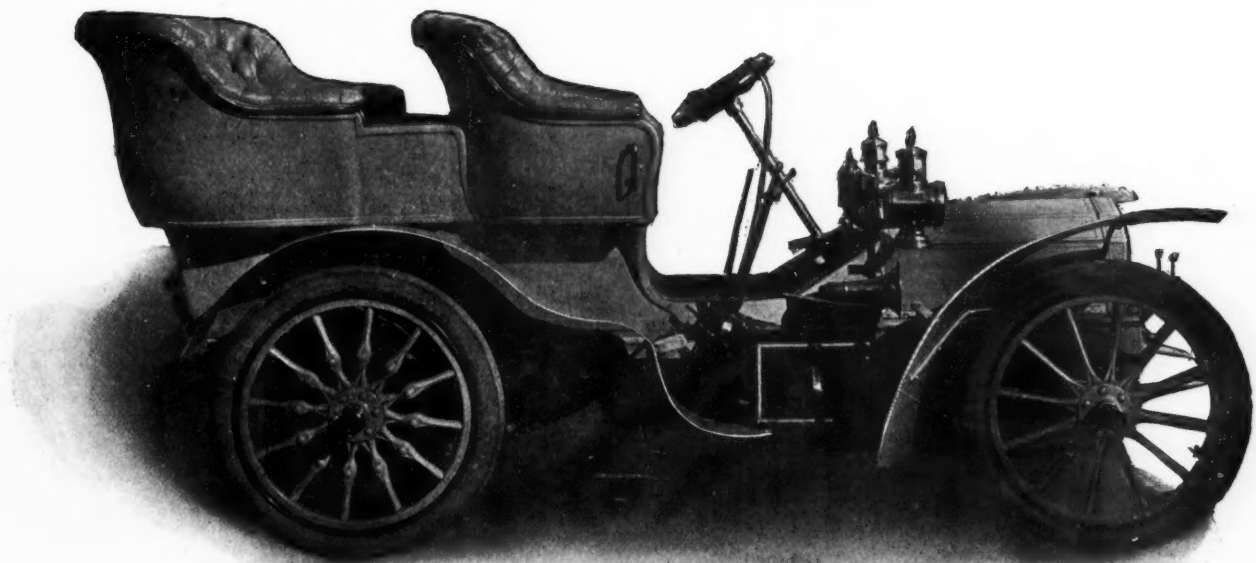




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**Automobiles**  
AND  
**Auto Boats**



24-30 H. P. F.I.A.T. CAR, WITH "KING OF THE BELGIANS" BODY.

## A FEW REASONS WHY F.I.A.T. Automobiles are Superior:

NO HAND LEVERS—Foot pedal control absolutely; hands free for steering.

NO ANNOYING, GREASY OIL DRIP—Automatic Oiler only.

NO COILS OR BATTERIES TO GET OUT OF ORDER—Ignition entirely by magneto.

NO VIBRATION—No noise; nothing but absolute pleasure and satisfaction.

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Poster Catalogue Mailed Free.

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Sole American Agents. Licensed Importers under Selden Patent

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# 97 $\frac{29}{100}$ MILES AN HOUR

Baron De Caters, at Ostend, drove a flying Kilometer in 23 seconds. His machine was fitted with

## CONTINENTAL TIRES



This speed maintained between New York and Chicago would finish the journey in 10 hours and 7 minutes. THINK OF IT! The 20th Century Limited, the fastest long distance train in the world, makes this trip in 20 hours. Baron De Caters traveled TWICE AS FAST as the swiftest locomotive in the world. IMAGINE THE STRAIN ON THE TIRES. If it can successfully withstand this speed, it ought to be the tire on your machine.

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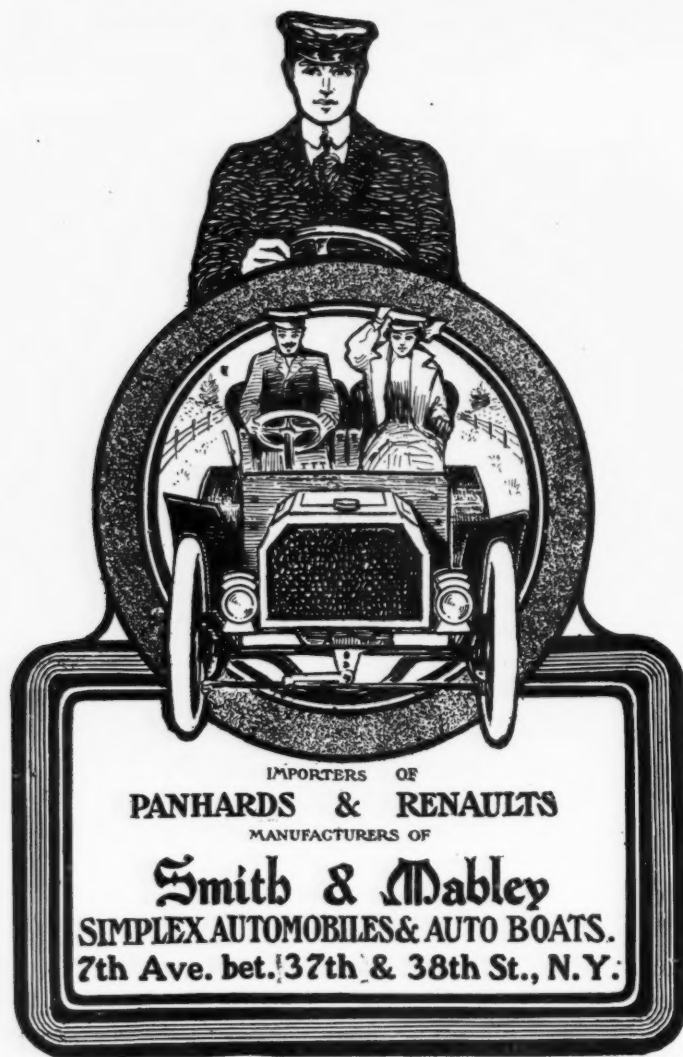
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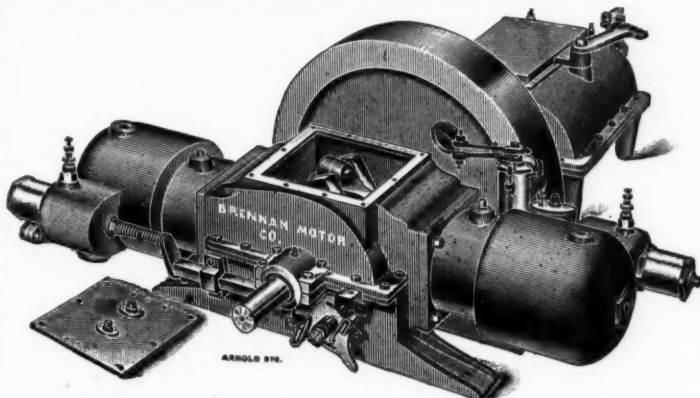
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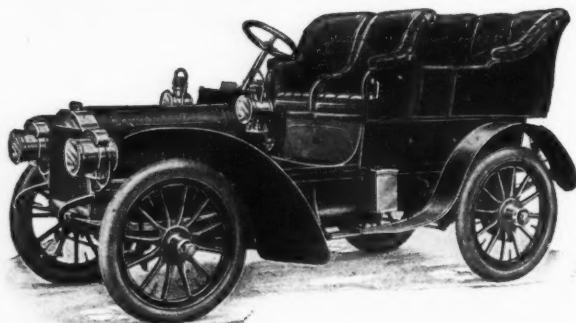
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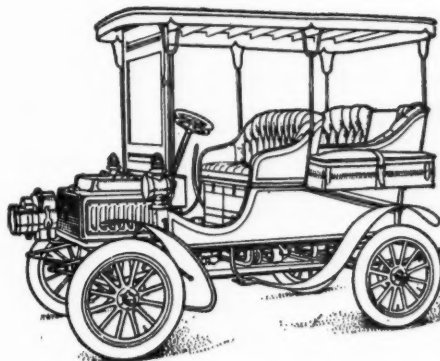
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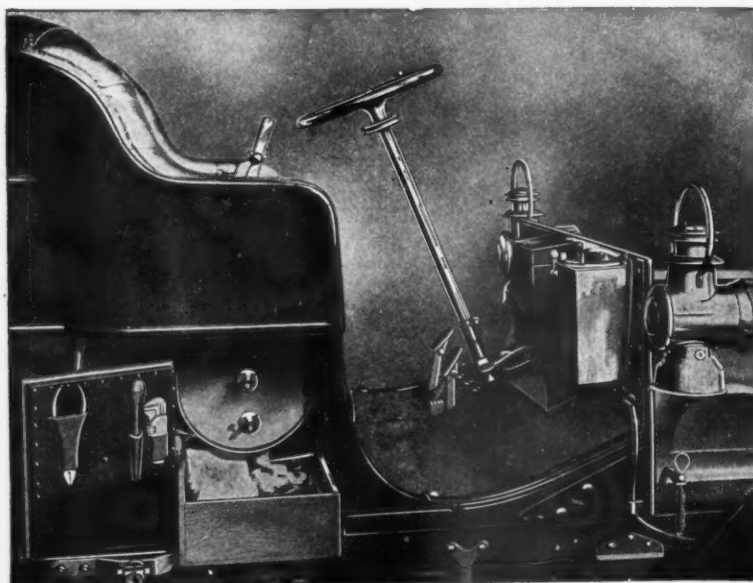
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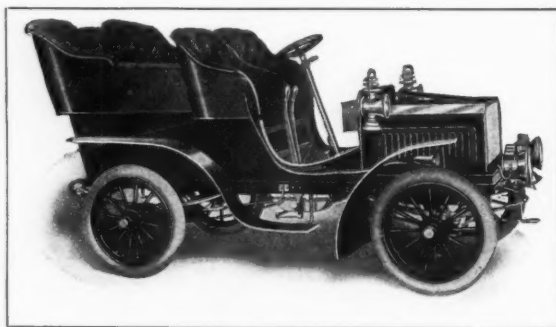
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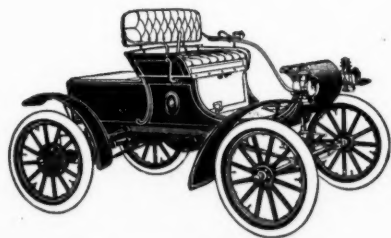
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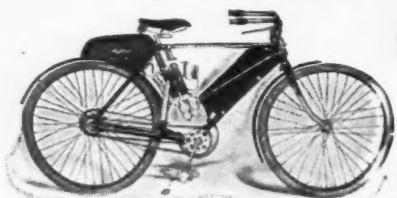
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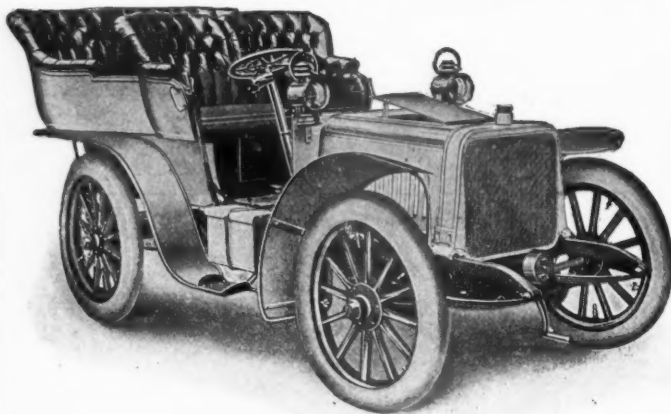
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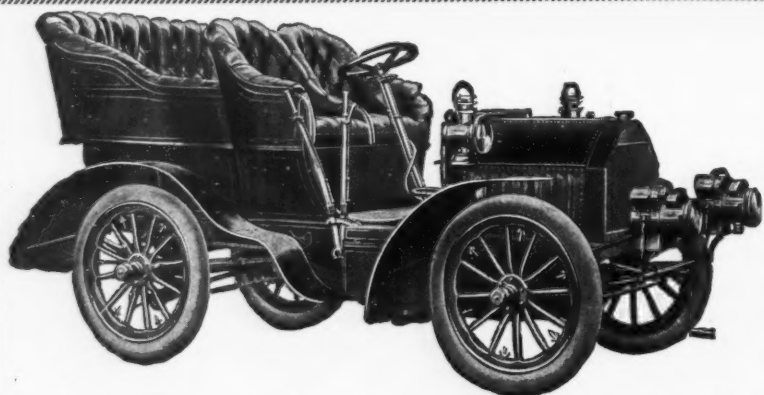
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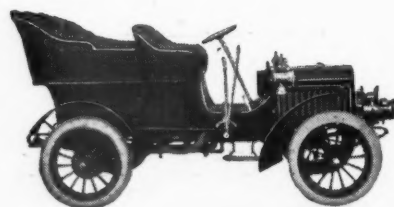
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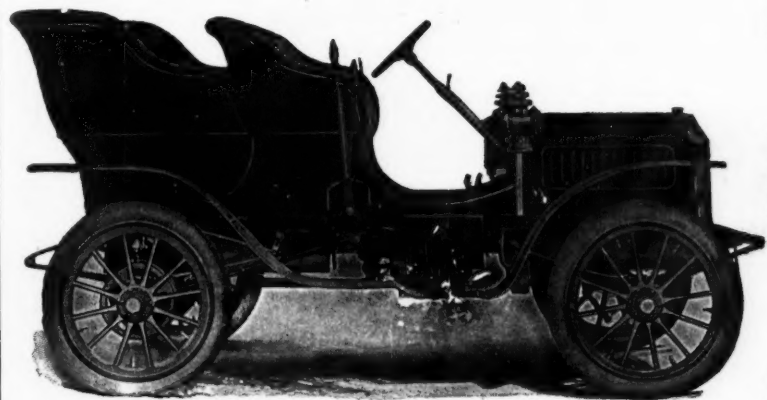
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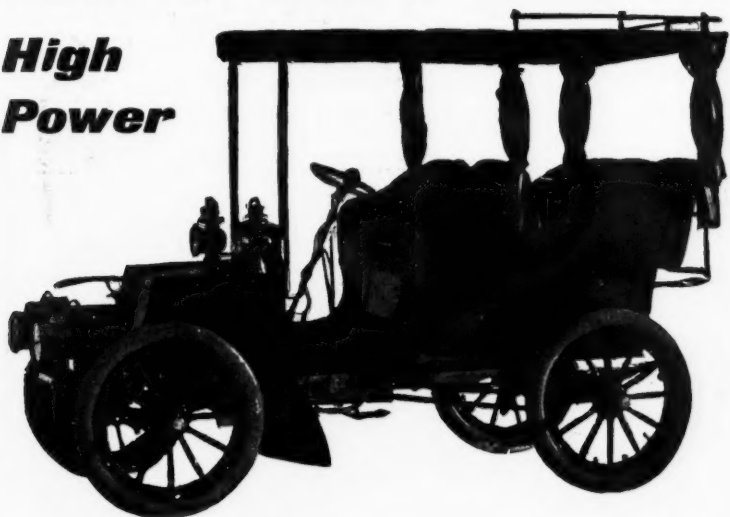
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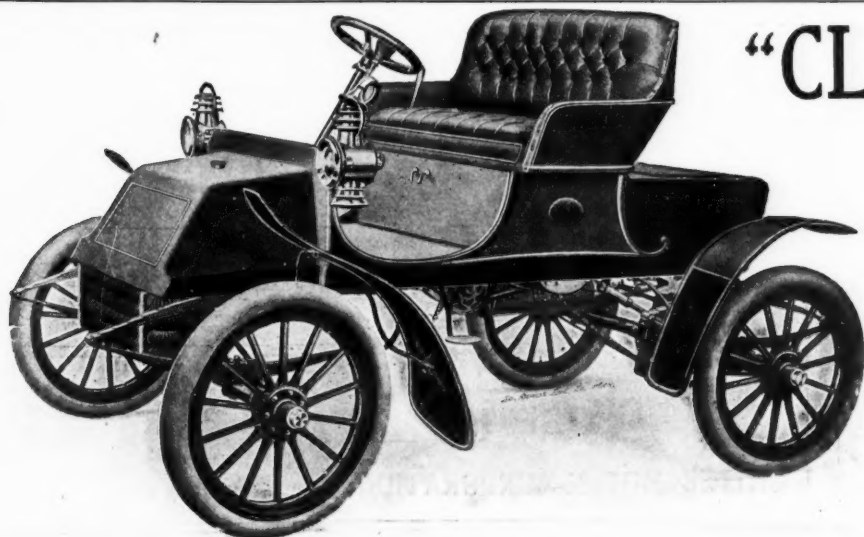
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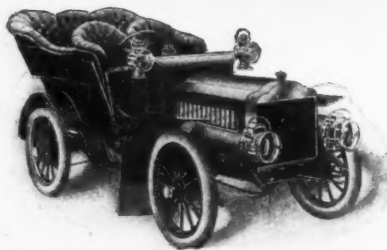
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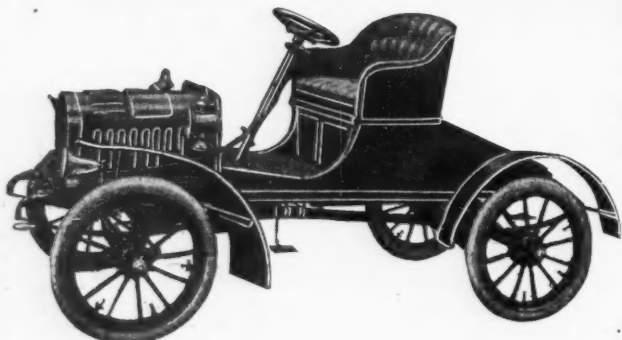
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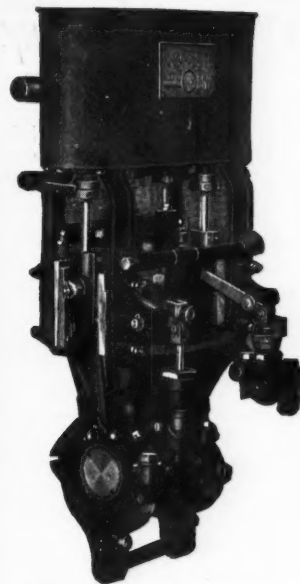
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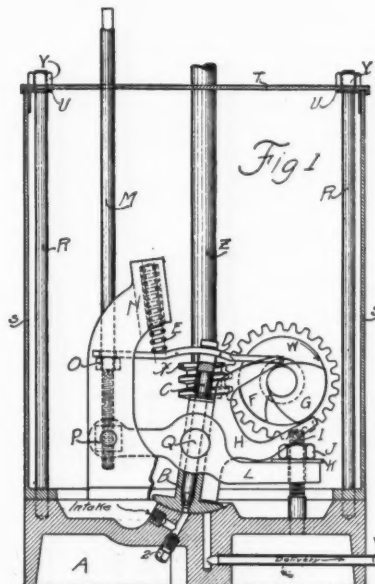
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THE FINEST AUTOMOBILE CUP IN AMERICA  
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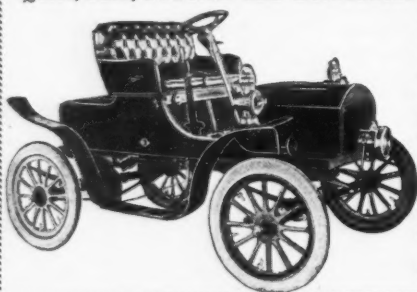
Measures the oil for the bearings, and  
always sends it there.

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**Built for American Roads**

Mud, Sand and Hills shrink before it. A model of simplicity. Quiet, Safe, Powerful and Economical.



More power per pound than any other car on the market. Cylinder 4 3/8 x 5 1/4. The only Runabout equipped with sliding Gear Transmission on the market to-day. Agents wanted. Write for prices and catalogue.

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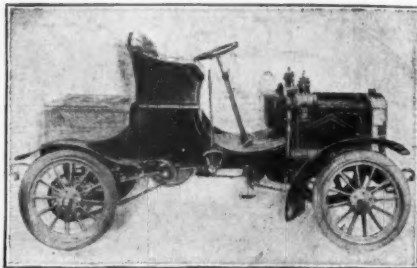
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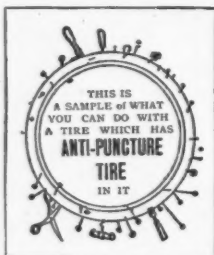
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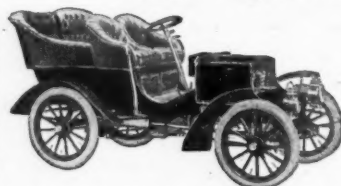
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How do You Like to Ride? As your own sweet will may dictate? Up hill—down hill—at high speed or at a snail's crawl—all on the high gear? With the

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four-cylinder air cooled car, an 18 per cent grade 1720 feet in length was taken from a standing start, and a speed of 28 miles per hour attained at summit of hill. Better investigate

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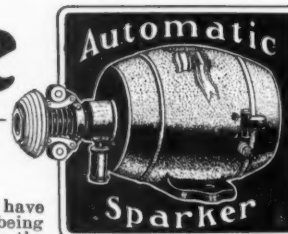
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until your battery fails you and you have had the annoying experience of being "towed back," before you investigate the

### Apple Automatic Sparker

A neat compact little dynamo that gives a steadier, more reliable and hotter spark, increasing the speed and power of your engine. For Automobiles, Motor Boats and Gas Engines of all sorts. Always ready to start; dust, oil and water proof. You should know more about it; why not write for full information regarding our ignition apparatus today?

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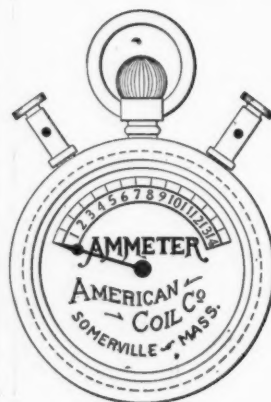
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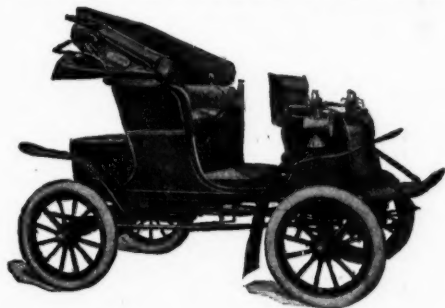
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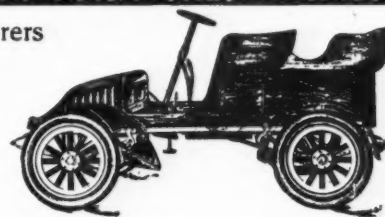
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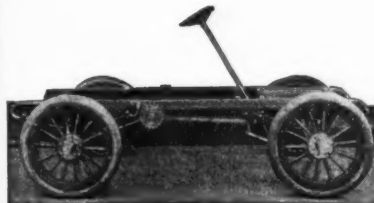
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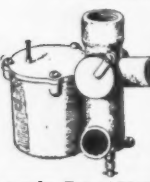
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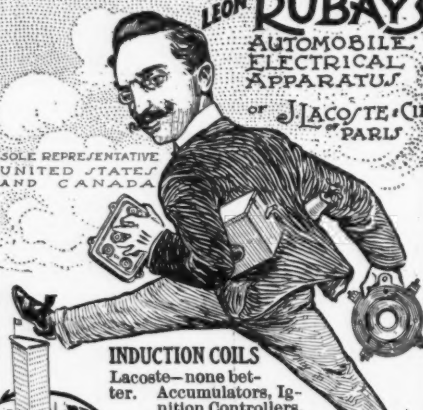


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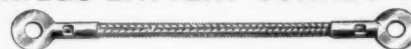
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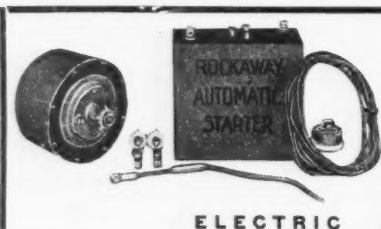
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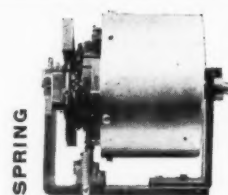
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Heavy Touring Car Plunges  
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Two Forward Speeds and a Reverse. Made entirely of Spur Gears cut from Steel Blanks with Hardened Teeth, Running in Oil.  
No Internal or Bevel Gears.

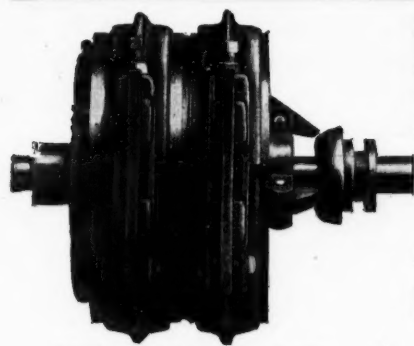
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Positive Circulating Pump, Brass or Aluminum



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Have designed many successful Engines and Autos complete. Write me for advice on your hard problems.  
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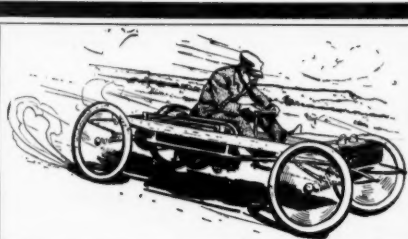
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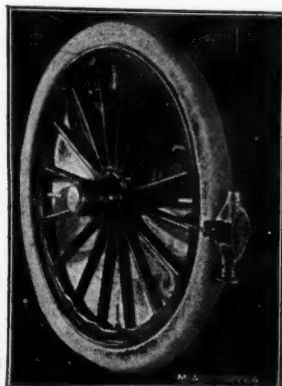


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WHY let your tires go to pieces while practically new when you can make them wear twice as long by using our \$5.00 Vulcanizer?

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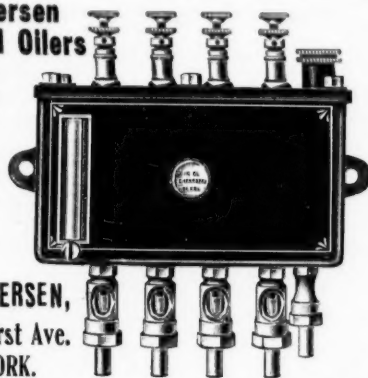
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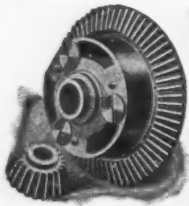
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We Manufacture CARRIAGE Carpets  
and no other kind :: Send for samples



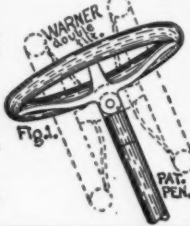
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Send for Sample on Approval. Cat. Free.

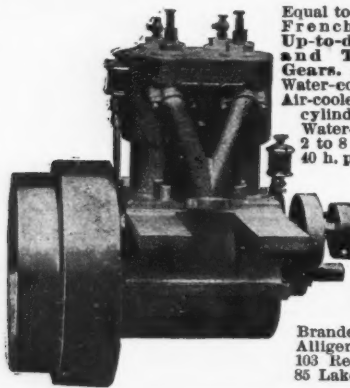
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"STAYS RIGHT THE LONGEST"

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Metric: 1/4 inch and 3/8 inch G. P. T

The T. G. I. Spark Plug is not "Soot-proof," nor Unbreakable, but is used in preference to others in thousands of Automobiles in this country, because it gives the most uniformly satisfactory results. Immediate deliveries in any quantities.

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THE STERLING ELLIOTT BALL-BEARING

## Turn Table

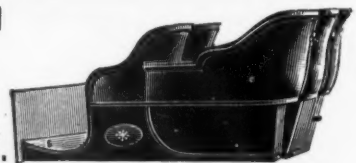
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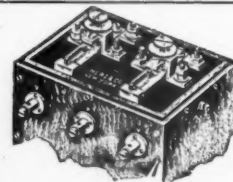
150 Nassau Street, NEW YORK

One of these Turn Tables can be seen at the new salesrooms of the WINTON MOTOR CARRIAGE CO, 1706 Broadway, New York.

**Laminated  
Wood  
BODIES  
and  
FENDERS.**



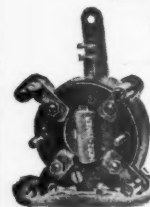
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The GUENET COILS with CARPENTIER INTERRUPTER are recognized as the cream of the French market. Sticking vibrator impossible.

Irregular Ignition is Caused by a Bad Circuit Breaker



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**HERZ & CO. 55 GRAND STREET**  
Ignition Specialists NEW YORK

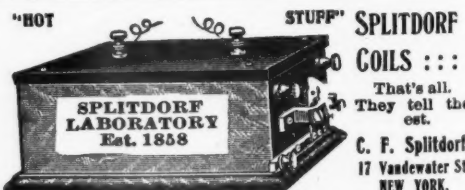
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THE  
**Frantz Body Mfg. Co.**  
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## FREDONIA CARS FOR DAILY USE

Send for Catalogue  
The Fredonia Mfg. Co., Youngstown, Ohio



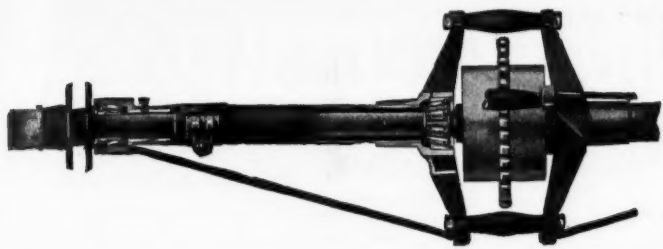
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COILS :::  
That's all. They tell the rest.  
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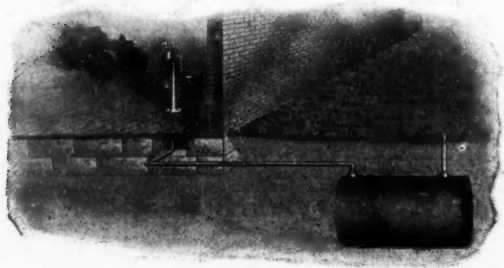
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Only Roller Bearing capable of taking up all wear.  
Warranted for two years.

See Our Exhibit at World's Fair, Transportation Building.

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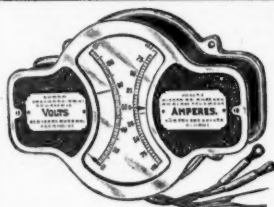


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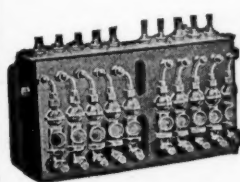
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